Maine Department of Environmental Protection

General Application for Waste Discharge License (WDL) / Maine Pollutant Discharge Elimination System (MEPDES) Permit

Regulatory requirements for the preparation and filing of applications may be found in Chapters 2, 521 and 522 of the Department's rules.

GENERAL INSTRUCTIONS

1. This general form is to be used to make application for the discharge of pollutants to the surface waters of the State, from all source except from privately owned discharges subject to the Over Board Discharge Program requirements.

2. Applicants are responsible for publishing public notice of their application at the time it is filed with the Department. See pages 7 and 8.

3. For a proposed new discharge of wastewater of more than 25,000 gallons per day or a project involving licenses from more than two bureaus in DEP, an applicant must conduct a public informational meeting before submitting an application to the Department. See page 7.

4. In some circumstances an applicant must have a pre-application or pre-submission meeting with the Department prior to filing of an application. See page 9.

5. At the time an application is filed with the Department, a copy must be provided to the municipal office and notice provided to all abutters by certified mail. See page 7.

6. Application fees must be paid at the time an application for a **new** discharge or permit is filed. Contact the Department for additional information and calculation of the fee amount. For existing discharges, fees are charged on an annual basis and application fees are not required with an application for permit renewal.

7. Attach additional sheets as necessary in answering specific questions. Be sure to number each sheet to identify the question to which it pertains.

8. Failure to fully complete all required forms or to pay necessary application fees will result in the application being returned.

9. After completing the application, submit 2 copies to:

   Maine Department of Environmental Protection
   Bureau of Water Quality
   Division of Water Quality Management
   State House Station 17
   Augusta, Maine 04333-0017

10. Please read the entire application form before furnishing any information. If you need any assistance in filling out the form or required attachments, please contact the Department at the above address or by calling (207) 287-7688.

This application is for a:
■New discharge ☐Renewal ☐Increased discharge ☐Transfer of owner ☐Modification ☐Other: _____

If assigned: MEPDES#: ME WDL #: W - - - -

FACILITY AND APPLICANT INFORMATION

1. Facility Information (911 Address):
   Facility Name: Site FB02 (Bald Rock) Receiving Water Name(s): Frenchman Bay
   Town: Gouldsboro State: ME Zip: 04607
   Facility Latitude/Longitude Coordinates: See Attachment 1 for coordinates
   Facility Type: ☐ Federal ☐ State ☐ Other Public ■ Private ☐ Other

2. Applicant Information:
   Name: American Aquafarms (Thomas Brennan) Telephone: (207) 405-7451
   Address: 68 Commercial Street e-mail: thomas.j.brennan@americanaquafarms.com
   Town: Portland State: ME Zip: 04101

3. Owner Information (if different from Applicant):
   Name: Telephone:
   Address: e-mail:
   Town: State: Zip:

4. Operator Information (if different from Applicant/Owner):
   Name: Telephone:
   Address: e-mail:
   Town: State: Zip:

NOTE: If a wastewater treatment facility is operated under a contract with third party, the contract for services must be reviewed and approved by the Department.

5. Cognizant Official (Person to whom correspondence regarding this application should be sent):
   Name: Elizabeth Ransom, Ransom Consulting, LLC Telephone: (207) 772-2891
   Address: 400 Commercial Street, Suite 404 e-mail: elizabeth.ransom@ransomenv.com
   Town: Portland State: ME Zip: 04101

6. Person in responsible charge of the treatment facility operations:
   Name: TBD Telephone:
   Operator's license #: Grade: Professional Engineer?
   Note that American Aquafarms will hire a Maine certified waste water treatment plant operator to act as Site Manager.

7. Briefly describe nature of business and activities requiring WDL /MEPDES Permit:

   American Aquafarms is proposing the development of an ocean-based, closed-pen salmon farming facility.

ELECTRONICALLY SIGNED DECISIONS

8. Electronically signed decision options. To expedite processing of applications and reduce paper usage, **all final decisions on an application will be electronically signed by the Commissioner (or his/her designee) and will be sent to the respective e-mail addresses provided for the Applicant and the Cognizant Official** listed on this application, unless the "opt out" signature block is signed below.

I hereby decline to receive an electronically signed decision on the WDL/MEPDES permit via e-mail and choose to receive manually signed (hand written) decision via regular (U.S. Postal) mail.

Sign to DECLINE only

(Applicant): **Date:**

SUPPORTING MATERIALS AND REQUIRED ATTACHMENTS

9. For **new and transfer applications only** from privately-owned facilities, include:

☐ A Certificate of Good Standing issued by the Maine Secretary of State. See Attachment 2.

☐ Proof of Title, Right or Interest (TRI) in the property on which the treatment system and outfall pipes and structures are or will be located. See Chapter 2 of the Department's rules for TRI criteria. American Aquafarms has applied for a Standard Lease from the Maine Department of Marine Resources (DMR).

10. For **transfer applications only**, answer the following then skip to the Certification on page 6.

A. Name of current/former owner: N/A
B. Describe any planned changes in the current discharge:

C. Provide a statement describing the technical and financial capacity to comply with the current permit conditions and applicable laws and rules. (use a separate sheet)

11. Unless submitted previously and there have been no changes, provide a topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures

12. If modification of an existing permit is being requested, attach a statement describing the nature of the modification and the reasons or circumstances necessitating the change. Include any relevant modified process flow schematics available.

13. Attachments for specific activities and circumstances. For each specific question, check 'Yes' or 'No' to indicate if the statement is applicable to a discharge or activity described in this application. Where 'Yes' is checked, attach the applicable form.

Specific Question	Yes	No	Applicable Form
A. Is this facility a publicly owned treatment works treating sanitary wastewaters?	☐	☑	DEP Form: Publicly Owned Treatment Facilities
B. Does this application seek authorization to introduce septage into treatment works?	☐	☑	DEP Form: Disposal of Septage and Holding Tank Wastes in Wastewater Treatment Facility
C. Is this application for a subsurface wastewater disposal system?	☐	☑	DEP Form: Application for Subsurface Wastewater Disposal System
D. Is this application for a land surface (including spray irrigation) wastewater disposal system?	☐	☑	DEP Form: Application for Surface Wastewater Disposal System
E. Is this a food processing facility or POTW that treats food processing wastewaters?	☐	☑	DEP Form: Food Processing Facilities
F. Is this an existing discharge of industrial process wastewater?	☐	☑	EPA Form: 2C
G. Is this to be a new discharge of industrial process wastewater?	☑	☐	EPA Form: 2D
H. Is this a discharge of non-contact cooling water?	☐	☑	EPA Form: 2E
I. Is this discharge of storm water associated with an industrial activity?	☐	☑	EPA Form: 2F
J. Is this a discharge of non-process wastewater?	☐	☑	EPA Form 2E
K. Is this application for an Atlantic salmon net pen facility?	☑	☐	DEP Form: Supplemental Information for Atlantic Salmon Aquaculture Net Pen (for Individual Permit)
L. Is this a fish hatchery or rearing facility?	☑	☐	DEP Form: Fish Rearing Facilities
M. Does this application involve a new or modified outfall structure?	☑	☐	DEP Form: Outfall Information
N. Is this application for a waste snow dump?	☐	☑	DEP Form: Supplemental Information for Snow Dumps

OUTFALL AND TREATMENT INFORMATION

Use attachments as necessary to provide details for each discharge point and treatment system.

14. Describe each discharge location. Include all combined sewer overflow (CSO) points, bypasses, emergency discharge points, at pump stations, etc.

Outfall Number/Name	Description, Volume Discharged and Receiving Water
Outfall 1	Waste treatment system reject water
Outfall 2	Cage outlet
	See additional information in Attachment 3.

If any of the above-listed discharges (other than CSOs) are intermittent or seasonal, please describe the nature, circumstances and duration of each.

See Attachment 3.

15. Briefly describe current treatment facilities or methods for each discharge.

N/A - No current treatment facilities or methods for discharge currently occur at the proposed lease site.

16. If this is a renewal application, please describe all significant modifications to the treatment facilities (and collection system if applicable) since the last permit application was filed.

N/A

17. Are new or expanded treatment facilities or outfall structures being proposed? Yes If so, please include a construction schedule. Plans and specifications must be submitted to the Department for review and approval prior to construction of the facilities. See Attachment 4.

18. If this application is for a new or increased discharge, include a statement that:

A. describes in detail the nature of and reason for the requested increase in pollutant loading to the receiving water;
B. if the Department determines that the discharge will diminish the remaining assimilative capacity of the receiving water, demonstrates that alternative methods to reduce or eliminate the increased discharge are not feasible. Include engineering and economic analyses that consider alternative methods of production, process controls, wastewater minimization methods, improved wastewater treatment methods and alternate disposal sites; and
C. if the Department determines that the discharge will diminish the remaining assimilative capacity of the receiving water, demonstrates that the increased pollutant load will result in important social and economic benefits to the State.

See Attachment 5.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Additionally, by signing below, I certify that
(1) notice of this application has been made by publication in The Ellsworth American, See Attachment 6
newspaper circulated in the area where the project site is located on or about March 25, April 22, & April 29, 2021
(a copy of the advertising form is included in this application); (2) notice has been sent by certified mail or Certificate of Mailing to owners of land abutting the discharge site (a copy of the list of abutters is included in this application); and (3) notice and a copy of this application have been provided to the clerk of the municipality(ies) where the discharge is located. (4) Further, if this is a new discharge over 25, 000 gallons per day, a public meeting attended by approximately 158 members of the public was held on May 6, 2021. In addition, 4 government agency representatives, 2 staff members from the Maine Congressional delegation, and 5 members of the consultant team attended the meeting (see Att. 6).
The forgoing steps have been taken in accordance with the instructions attached to this application and the provisions of Chapters 2 and 522 of the Department's rules.

By: Signature:  Date: 5/17/21

Printed Name: Thomas J. Brennan

Title: Director of Project Development

Assisting Parties. If the applicant has been assisted in preparing this application, the person assisting must sign below.

Signature:  Date: 5/17/21
Printed Name: Elizabeth Ransom Telephone: (207) 772-28
Affiliation: Ransom Consulting, LLC
Address: 400 Commercial Street, Suite 404
Town: Portland State: ME Zip: 04101
Professional Registration or Certification: Professional Geologist, License #505

See following pages for requirements on public notice, public meetings, pre-applications meetings and pre-submission meetings.

Instructions for providing notices of the application. For all applications, the first 3 items must be completed. If the application is for a new discharge, you must also complete item 4.

1. *Publication of Public Notice.* Applicants for waste discharge permits are required to publish a public notice that the application is being file with the Department of Environmental Protection. The notice must be published within 30 days prior to the application being sent to the Department. The notice should be published in the legal advertisement section of a daily or weekly newspaper having general circulation in the area where the discharge will occur. If the public notice is not published at the proper time or if the application is returned because it is incomplete, you may be asked to have the notice published a second time.

Using the form on the next page, fill in the blanks with the appropriate information. Strike out all of the items (CSO, multiple discharge sources, etc.) in the second paragraph that do not apply to your discharge. The form may then be sent to the newspaper that is to publish the notice. Additionally, include a copy of the form with the application filed with the Department.

2. *Notice to Abutters.* Applicants are also required to send a copy of the public notice by certified mail or Certificate of Mailing to all abutting property owners within 30 days prior to the application being filed with the Department. For the purposes of public notice of this application, an "abutter" is any person who owns property that is both (1) adjoining and (2) within 1 mile of the delineated project boundary, including owners of property directly across a public or private right of way. Additionally, include a copy of the form with the application filed with the Department.

3. *Notice to Municipal Office.* Applicants are required to send a copy of the public notice by certified mail to the town or city clerk of each municipality where the discharge is located within 30 days prior to the application being filed with the Department. Applicants must also file a duplicate copy of the application with each municipality.

4. *Public Meeting.* Where the application is for a new discharge of greater than 25,000 gallons per day, you must hold a public meeting in accordance with Chapter 2, Section 8, of the Department's rules. Notice of the meeting must be sent to abutters and the clerk of the municipality(ies) where the discharge is located at least 10 days prior to the meeting. Notice of the meeting must be published in the same newspaper used to publish the notice of filing.

After all required notices have been made, sign the statement on the Certification page of the application.

NOTICE OF INTENT TO FILE
MAINE WASTE DISCHARGE LICENSE / MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT APPLICATION

Please take note that, pursuant to 38 MRSA, Sections 413 and 414-A, _____ of _____ intends to file a wastewater discharge permit application with the Department of Environmental Protection (DEP). The application is for the discharge of _____ of _____ to the _____ in _____, Maine.

Include as applicable:

CSO: Included in this application is the discharge from _____ Combined Sewer Overflows to_____.

Multiple industrial point sources: The application includes _____ associated with the primary activity described above.

Antidegradation: The application proposes a new or increased discharge that may lower existing receiving water quality within its legal classification, and the application contains a statement regarding important social and economic benefits resulting from the activity causing the discharge, pursuant to 38 MRSA, Section 464.

Mixing Zone: The application includes a request for establishment of a mixing zone in the _____, inside of which classifications standards and uses not need to be met, pursuant to 38 MRSA, Section 451.

The application will filed on or about _____ and will be available for public inspection at DEP's Augusta office during normal business hours. A copy may also be seen at the municipal offices in _____.

A request for a public hearing or request that the Board of Environmental Protection assume jurisdiction over this application must be received by the DEP, in writing, no later than 20 days after the application is found acceptable for processing, or 30 days from the date of this notice, whichever is longer. Requests shall state the nature of the issue(s) to be raised. Unless otherwise provided by law, a hearing is discretionary and may be held if the Commissioner or the Board finds significant public interest or there is conflicting technical information.

During the time specified above, persons wishing to receive copies of draft permits and supporting documents, when available, may request them from DEP. Persons receiving a draft permit shall have 30 days in which to submit comments or to request a public hearing on the draft.

Public comment will be accepted until a final administrative action is taken to approve, approve with conditions or deny this application. Written public comments or requests for information may be made to

Maine Department of Environmental Protection
Division of Water Quality Management
Department of Environmental Protection
State House Station #17
Augusta, Maine 04333-0017
Telephone (207) 287-7688

Pre-application and pre-submission meetings

Pre-application meetings. Pre-application meetings between the applicant and the Department are an opportunity for the applicant to determine the statutory and regulatory requirements that apply to a specific project and to identify a Project Manager for the application. The purpose of these meetings is to identify issues, processing times, fees and the types of information and documentation necessary for the Department to properly assess the project. The applicant shall consult the appropriate bureau Permit Assistance Coordinator to determine what information the applicant must provide before or during a pre-application meeting. Any applicant may request a pre-application meeting. The Department shall make a date available for the meeting as expeditiously as possible, but no later than 30 days from receipt of a written request and receipt of all information required for a pre-application meeting by the bureau. The Department shall prepare a written summary of all pre-application meetings.

For waste discharge permits, pre-application meetings are required prior to submission to or acceptance by the Department of an application for the following:

New wastewater discharge license for a discharge greater than 25,000 gallons per day (38 M.R.S.A. Sections 413, et seq.);

Projects requiring new or amended licenses involving more than two bureaus.

Pre-submission meetings. Pre-submission meetings between the applicant and the Department occur after the applicant has finished preparing the application for submission. These meetings are an opportunity to review the assembled application to ensure that the necessary information has been included prior to filing the application with the Department. An applicant may request a pre-submission meeting by contacting the Project Manager, or the Permit Assistance Coordinator for the bureau if no Project Manager has been identified. The Department shall make a date available for the meeting as expeditiously as possible, but no later than 20 days from receipt of a written request.

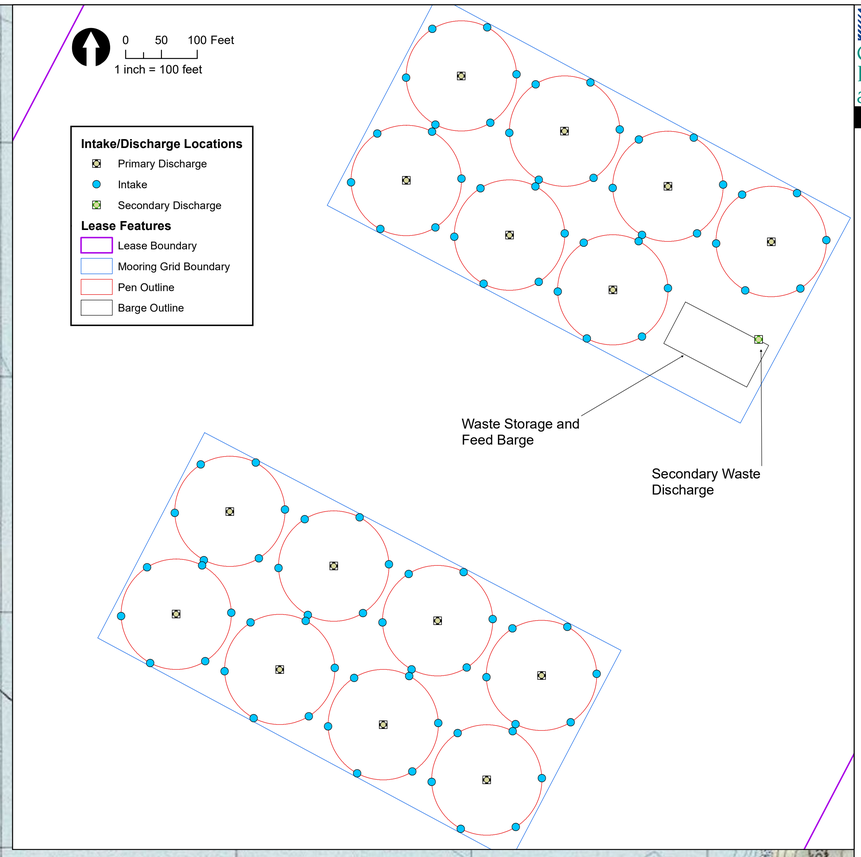
For waste discharge permits, a pre-submission meeting is required prior to submission to or acceptance by the Department of an application for the following:

Any application for which a pre-application meeting was held; or

Any application that has been previously rejected by the Department (see Chapter 2, Section 7-B of the Department's rules).

Waivers. The requirement of a pre-application or pre-submission meeting may be waived by written notice from the Department and agreement by the applicant. The Department will agree to waive a pre-application or pre-submission meeting if the Department is satisfied that such a meeting would be of no value in achieving the purposes noted above.

Note: The waiver of a pre-application or pre-submission meeting does not waive the public informational meeting required for new discharges of more than 25,000 gallons per day.



RANSOM
Consulting Engineers and Scientists

Legend and Notes

- Lease Boundary
- Mooring Grid Boundary
- Pen Outline
- Barge Outline
- 1-Mile Buffer

General Notes:

1. Basemap from USA Topo server.
2. Some features shown are approximate in location and scale.
3. GIS data accessed and downloaded from the Maine Office of GIS, NOAA Digital Coast, and/or The National Map.
4. Pen layout and intake/discharge structure locations based on plans prepared by Aqua Knowledge AS.

Prepared For

American Aquafarms
68 Commercial Street
Portland, Maine

Site Address

Bald Rock
Frenchman Bay
Gouldsboro, Maine

Orientation and Scale

0 495 990 1,980 Ft
1 inch = 1,000 feet

201.05012 | *Apr 2021*

Supplemental Figure 1 Intake/Discharge Layout and Nearby Features

American aquafarms

ATTACHMENT 1
FACILITY LATITUDE/LONGITUDE COORDINATES

Proposed lease corner coordinates are provided in the table below.

Table 1-1: Lease Site Corner Coordinates

Corner Location	Corner Number	Latitude	Longitude	Easting (Maine State Plane East, feet)	Northing (Maine State Plane East, feet)
North	1	44.435400	-68.209717	1,060,067.6	280,343.6
East	2	44.433533	-68.204867	1,061,336.8	279,667.5
South	3	44.429117	-68.208167	1,060,480.6	278,054.7
West	4	44.430983	-68.213033	1,059,207.1	278,730.4

State of Maine

Department of the Secretary of State

I, the Secretary of State of Maine, certify *that according to the provisions of the Constitution and Laws of the State of Maine, the Department of the Secretary of State is the legal custodian of the Great Seal of the State of Maine which is hereunto affixed and of the reports of qualification of foreign business corporations in this State and annual reports filed by the same.*

I further certify *that AMERICAN AQUAFARMS INC., a WYOMING corporation, is a duly qualified foreign business corporation under the laws of the State of Maine and that the application for authority to transact business in this State was filed on April 02, 2020.*

I further certify *that said foreign business corporation has filed annual reports due to this Department, and that no action is now pending by or on behalf of the State of Maine to forfeit the authority to transact business in this State and that according to the records in the Department of the Secretary of State, said foreign business corporation is a legally existing business corporation in good standing under the laws of the State of Maine at the present time.*

In testimony whereof, I have caused the Great Seal of the State of Maine to be hereunto affixed. Given under my hand at Augusta, Maine, this first day of March 2021.

Shenna Bellows

Shenna Bellows

Secretary of State

ATTACHMENT 3
WASTE DISCHARGE MEMO

INTRODUCTION

American Aquafarms has sent out a notice of intent to file a discharge license with MEDEP to inform interested parties that may wish to provide input or comment on the process going forward. In addition, the company has initiated an extensive and ongoing outreach program during the last 6-8 months to educate stakeholders in surrounding areas and potential users of the proposed lease area about the proposed project. This includes meetings with local communities like the towns of Gouldsboro and Bar Harbor, scientific and educational organizations like College of the Atlantic and the MDI Biological Laboratory, political representatives (including members of the Maine congressional delegation, the office of Maine Senator Collins, and the Governor), special interest groups like Friends of Frenchmen Bay and Friends of Acadia and others, as well as commercial users including meetings with local lobster fishermen from around Frenchmen Bay and Maine Lobstermen Association. American Aquafarms has also had presentations to state and federal agencies like DMR, MEDEP, DECD, USACE and Acadia National Park. The company has had and still has ongoing dialogue with numerous other interested parties ranging from private individuals expressing interest to commercial organizations and businesses based in the surrounding areas. We welcome the opportunity to address questions and concerns regarding our proposal in addition to the planned public meetings that are part of the regulatory process, and it is our desire to educate and explain as much as possible to ensure a process that is well informed.

OPERATION NARRATIVE

American Aquafarms plans to produce Atlantic salmon at sea using semi-closed containment system technology. This production method differs from the traditional way of farming finfish in open net pens in that the fish is completely isolated from the upper water stratum. This is achieved by an enclosing polymer sack that surrounds the entire rearing net that holds the fish. Water is supplied by pumps collecting water from deeper water stratum through elongated pipes extending down to desired depths of 25-50 meters. The water depth from which the water is collected can be chosen, as the pipe length can be altered. As the water moves from the bay into the pipes, it passes through a coarse filter, preventing fish and other marine organisms from entering the pipe.

This production method, in addition to providing a higher containment security (double barrier), has been shown to reduce the risk of pathogen infections. The applicable new technology provides a more suitable rearing environment for the fish promoting good fish welfare. Optimal fish swimming velocities are achieved by choosing inlet direction inside the cage, while representative levels of metabolites such as O2 and CO2 are monitored. Oxygen injection can be increased as the fish grows and the metabolic demand increases. By providing an optimal rearing environment, which in turn promotes greater fish welfare, the fish will be more robust and more resistant against stressors compared to fish reared under unfavorable conditions. By avoiding unnecessary environmental parameters, the farmer also avoids exposing the production stock to chronic stress, resulting in increased pathogen resistance.

In addition to producing robust fish, the main advantage of this technology is its potential to eliminate sea lice issues. To date, there has been no reports of sea lice manifestations from Norwegian salmon farmers benefitting from this closed pen technology.

Feed is distributed from a centralized processing barge to the 15 cages in the system. As the fish consume feed and excrete fecal matter, this waste is collected in a waste collection funnel in the bottom of the pen. The flow velocity in the lower part of the pen allows for separation of solids from the water flow, which later exits the cage. As the waste is collected in a sedimentation funnel, it is removed and transported to the process barge for treatment.

WASTE TREATMENT NARRATIVE

Production of Atlantic salmon in closed net pens offers advantages in terms of waste management as the technology allows for collection of settleable solids. Solid waste originating from salmon farming consists of fecal matter and uneaten feed pellets. As these settleable solids can be collected and processed, it allows for a reduced production footprint on the local environment surrounding the production site.

Aside from the solid waste, the production of fish also generates dissolved inorganic nutrients. The dissolved inorganic nutrients are metabolite end-products excreted by the fish. These are mainly CO2, NH3 and PO43-. Carbon dioxide and ammonia are excreted across the gills, and the phosphate is eliminated through the urine.

Dissolved nutrients travel with the main water flow out of the production units through a side port located at 30 m below water surface. Each pen is equipped with an emergency outlet at the top of the enclosing polymer bag. The flow velocity in the lower part of the pen allows for separation of solids from the water flow. At the proposed American Aquafarms facility, the waste handling and treatment process consists of two main steps: separation of settleable solids from main water flow through sedimentation (1) and waste dewatering (2). The locations of both steps are pointed out on the flow chart in detail below and described in the following section.

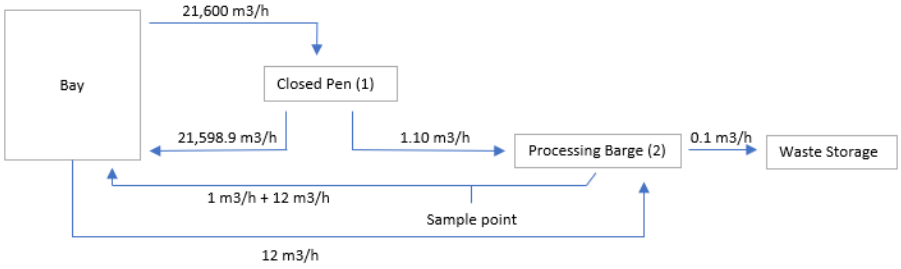


Figure representing the use of water and the allocation of water flow through one production unit.

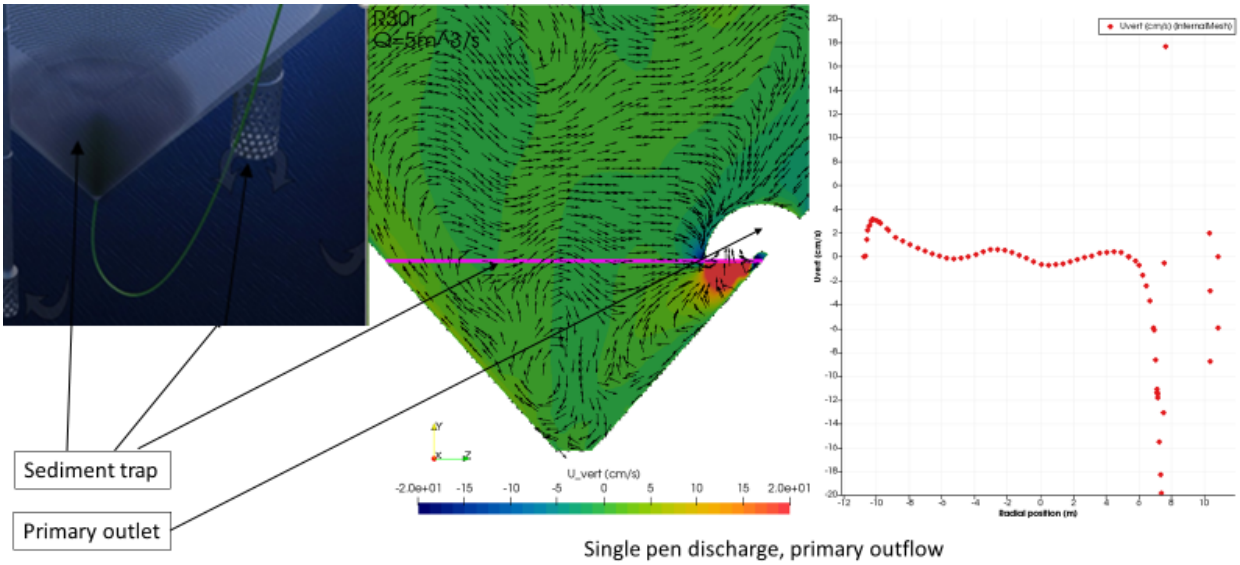
Sedimentation

In excess of 90 % of the fecal particles have a sinking speed higher than 2.5 cm/s, whereas feed pellets have a sinking speed between 6-11 cm/s[1] .

Waste in the form of particulate matter is collected in a funnel in the bottom part of the pen. Collection of this waste is performed through sedimentation. Detailed analysis of the waterflow in the bottom of the

[1] *Norwegian Institute of Marine Research (IMR) – The Fish and The Ocean p. 102 (2017)*

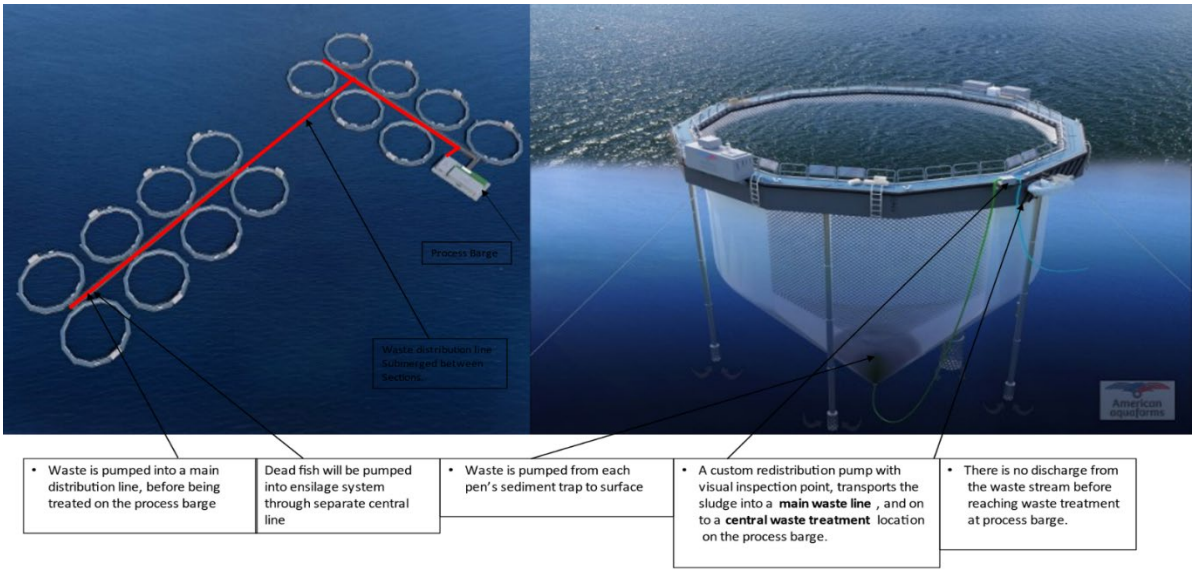
Ecopen (sediment trap) shows that the vertical waterflow at the discharge level has a max velocity of 2 cm/sec in 90% of this horizontal cross section of the pen. This means that more than 90% of the particulate waste will be sinking down to the bottom of the Ecopen from where it is continuously pumped to the top and distributed to second stages for dewatering and treatment.



Single pen discharge, primary outflow

Analysis of the waterflow in the bottom of the pen (sediment trap) shows that the vertical waterflow at the discharge level has a max velocity of 2 cm/sec in 90% of this horizontal cross section of the pen. Feed and fecal particles over 1.5 mm size have a settling velocity at more than 10cm/sec. This means that more than 90% of the waste over 1.5mm size will be sinking down to the bottom of the Ecocage from where it is continuously pumped to the top and distributed to second stages for dewatering and treatment.

As the build-up of the collected waste increases, a TSS sensor located in the collection funnel will activate a pump located on the cage side to start. The waste is transported from the bottom of the pen, through a pipe, and introduced to a centralized waste treatment system on the processing barge.



Waste Treatment

Dewatering is the only treatment process that is applied to the waste. The waste treatment system is a centralized system, collecting waste from all 15 closed pens. At the waste treatment system on the processing barge, the waste goes through two internal treatment steps:

1. Bluehouse filtration: Belt Filtration (100-150 µm)

2. Bluehouse S750 Dewatering: dewatering screw press (300-500 µm, 0.1 - 1 Bar)

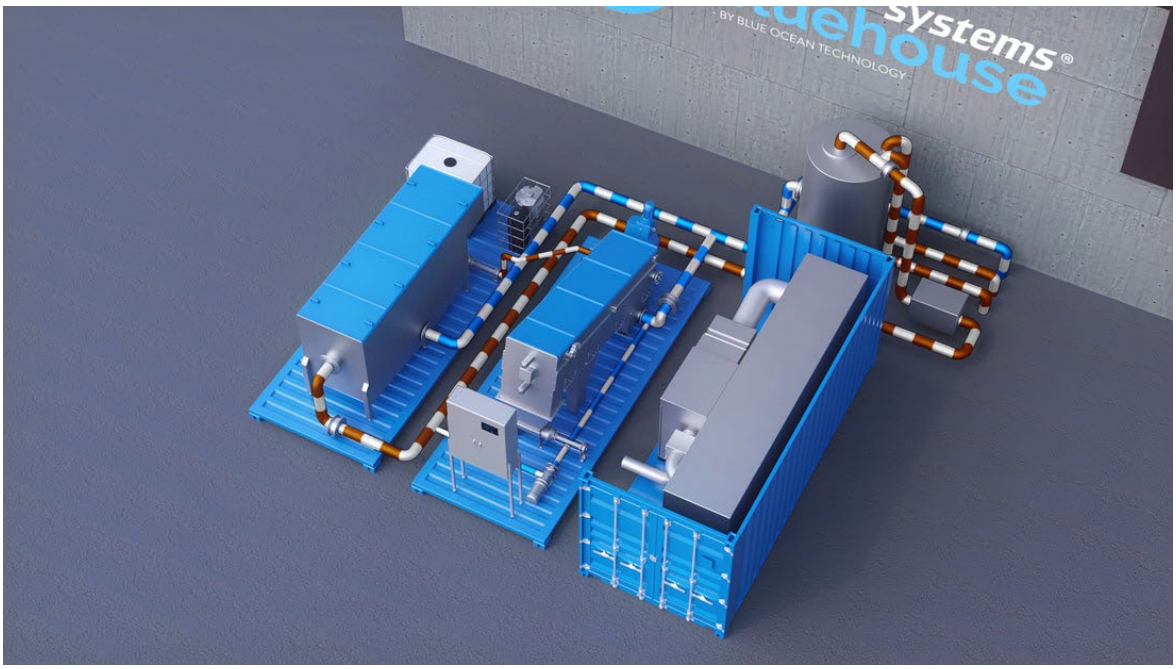


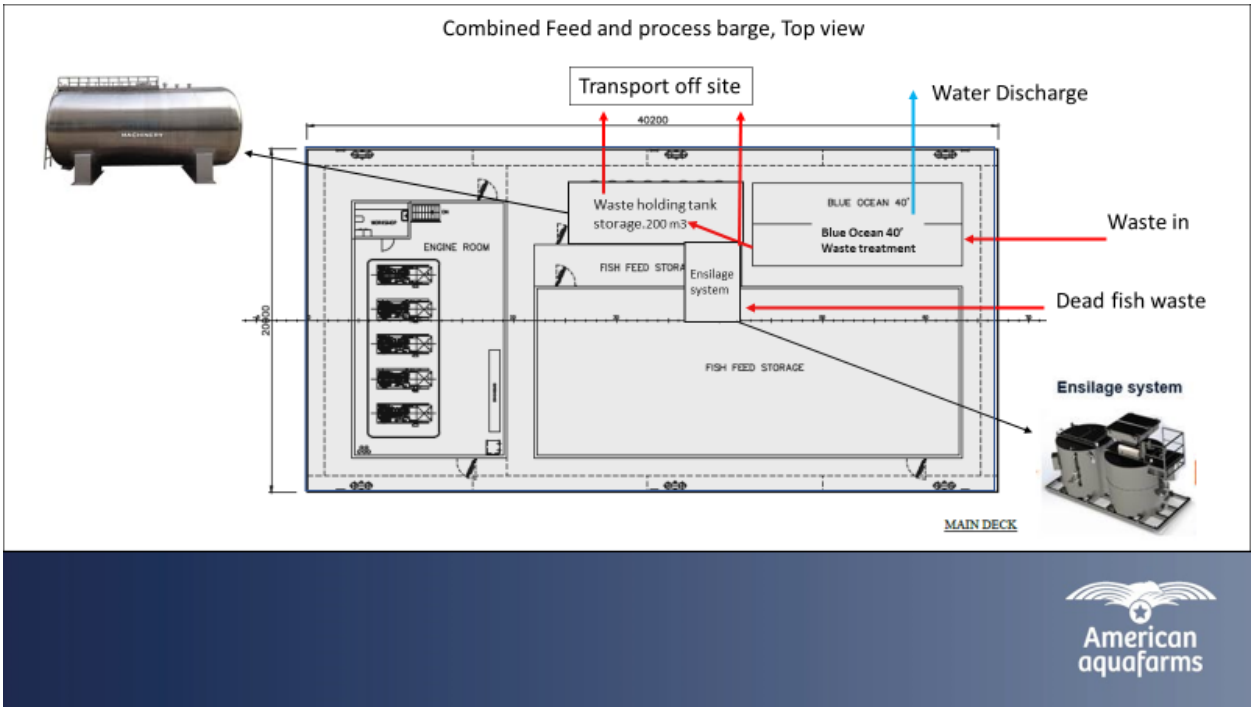
Illustration of general type of system

The waste will achieve a dry matter content of 25% after being processed through the waste treatment system. The dewatered waste will be transported and stored in a bulk waste collection tank for later transportation off-site. The surplus water that is separated from the treatment process is discharged.

A sample port for water sampling will be present on the pipe transporting the reject discharge water from the waste in the dewatering process. American Aquafarms proposes that technicians collect water samples on a weekly basis and provide them to the land-based facility laboratory for water analysis.

Measurement frequency for the different effluent parameters will comply to the table below and reported as stipulated by the final discharge permit.

Effluent Parameter	Measurement Frequency
Flow	Continuous
Biochemical Oxygen Demand (BOD5)	3/Week
Nitrogen (Total Ammonia and Total Nitrogen)	1/Week
Temperature	1/Day
pH	3/Week
Total Suspended Solids (TSS)	3/Week



Estimating Discharge from Closed Net Pens

When estimating discharge of nitrogen, phosphorous, organic carbon and TSS, the following three factors must be taken into account.

Feed Conversion Ratio (FCR) and Feed Composition

As the source of effluent, the feed use on a location and its composition must be determined.

A predicted FCR of 0.9[2] and a dry matter feed composition of 5.5–6.3% nitrogen, 0.6–1 % phosphorous and 51–65% organic carbon[3] are used as a basis for the discharge estimates. The average % value of each of these has been applied in the discharge estimate. Dry matter content in the feed is expected to be 95%.

Nutrient Allocation

Mass balance budgets are available from studies performed on salmon net pen farming, determining how much of the feed nutrients are allocated into fish growth, and how much is discharged in the form of dissolved and particulate waste. The findings are summarized in a 2018 report by the Norwegian Directorate of Fisheries and have been applied in the American Aquafarms discharge estimate.

[2] *SINTEF (2011) Culture of salmon and trout in closed containment systems – pre-project. Review for FHF, Fiskeri og havbruksnæringens forskningsfond.*
[3] *Directorate of Fisheries (2018) – Integrated Multi-trophic Aquaculture – perspectives, possibilities and challenges seen from a regulatory perspective.*

Waste treatment efficiency

The manufacturer of the Eco Pen states a sedimentation efficiency of 90%. The average value for each treatment efficiency ranges for pertinent nutrients have been applied in the American Aquafarms discharge estimates.

The discharges of N, P, C and TSS have been estimated for two discharge locations, Outfall 1 (Primary Pen Outlet Water) and Outfall 2 (Secondary Fish Waste Treatment). The discharge at Outfall 2 is the non-captured N, P, C and TSS in the waste treatment system, while the discharge at Outfall 1 equals the left-over (10%) of the particulate waste which is not captured in the cage sedimentation trap together with 100% of the dissolved waste.

Emergency overflow

The closed pen is equipped with an emergency overflow in the aluminum collar in case of unforeseen blockage of the primary outlet. This overflow allows American Aquafarms to eliminate water in case of such a blockage.

RAMP UP DESCRIPTION

Production ramp up will commence at FB02 (off Bald Rock) approximately 3-6 months after receiving the lease. The initial ramp up will take up to 32 weeks, gradually deploying 8 pens at the site; ramp up will continue and eventually approach full operational scale with deployment of all 15 pens. Harvesting is expected to commence approximately 17 months after initial deployment of fish in the sea.

Discharge will be proportional to production intensity. A production ramp up plan is described in the table below for the site.

The ramp-up plan describes the production from when the first pen is ready to use (hereafter referenced to as week/month 1).

FB02 (Bald Rock) – The table below presents the monthly feed use at the site over the first year of start-up and during a month of maximum production. Feed schedule will vary depending on seasonal factors, and age and size of the fish at specific temperatures and light conditions. Table is based on projections with a January start.

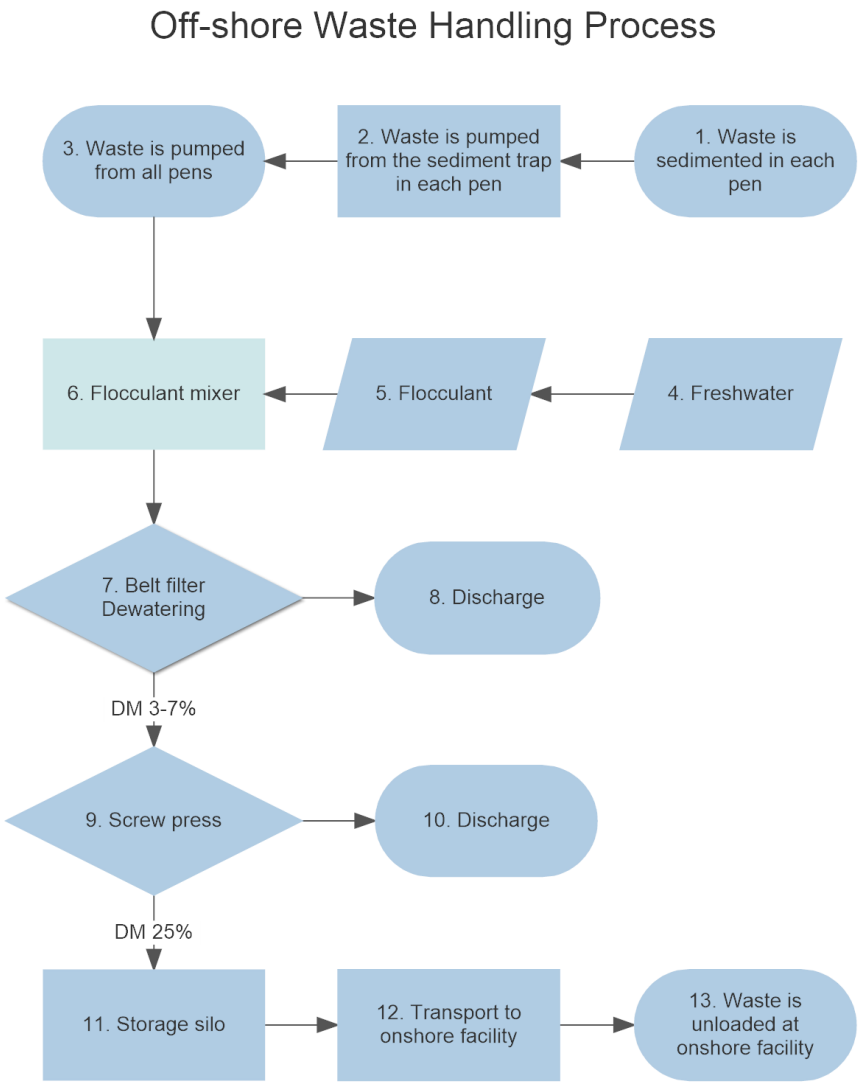
Month	**1**	**2**	**3**	**4**	**5**	**6**	
Pounds	28,220	42,387	94,151	168,672	323,095	527,533	
Month	**7**	**8**	**9**	**10**	**11**	**12**	**Max**
Pounds	843,930	887,109	1,016,445	1,260,445	1,384,336	1,439,335	3,126,908

The maximum feeding number is expected to have a duration of up to 1.5 months each year, while total average monthly feed use is estimated to be 2,480,175 pounds divided among 15 pens, once stage 3 is finalized and the desired production level is established.

The amount of feed is the primary factor determining the volume of discharge. Discharge values are calculated based on our projected feeding requirements for achieving 15,000 metric tons of annual production.

WASTE HANDLING OVERVIEW

The following diagram presents the off-shore waste handling process. Each step in the diagram is described further below.



1. Waste is sedimented in each pen. 90% of the particulate waste will separate from the main water flow and sediment in the solid trap in the bottom of the pen.

2. Waste is pumped from sediment trap in each pen – a pump located at each pen transports the waste from the waste collection funnel up to a collective waste transportation pipe.

3. Waste is pumped from all pens to the central processing barge – waste from all pens enters the centralized waste treatment system at the processing barge.

4. A small amount of freshwater is added to the process – freshwater is mixed with acetic acid.

5. Flocculant is mixed into the freshwater from step 4 – the flocculant is organic, and ecologically friendly.

6. Flocculant is mixed into the waste stream, to achieve better treatment efficiency.

7. Waste is dewatered using a belt filter (100-150 µm) – the resulting dry matter content is 3-7%.

8. The discharge from the dewatering process in step 7 – this discharge is combined with the discharge in step 10.

9. Waste is further dewatered using a screw press – through the screw press an increasing pressure from 0.1 to 1 bar is applied to the waste. Filter size on the blades are from 300 to 500 µm. The resulting dry matter content of the waste is 25%.

10. The discharge from the dewatering process in step 9 – this discharge is combined with the discharge in step 8.

11. The waste is pumped into storage silo, awaiting transport to on-shore waste treatment facility.

12. Waste is transported on-shore by boat.

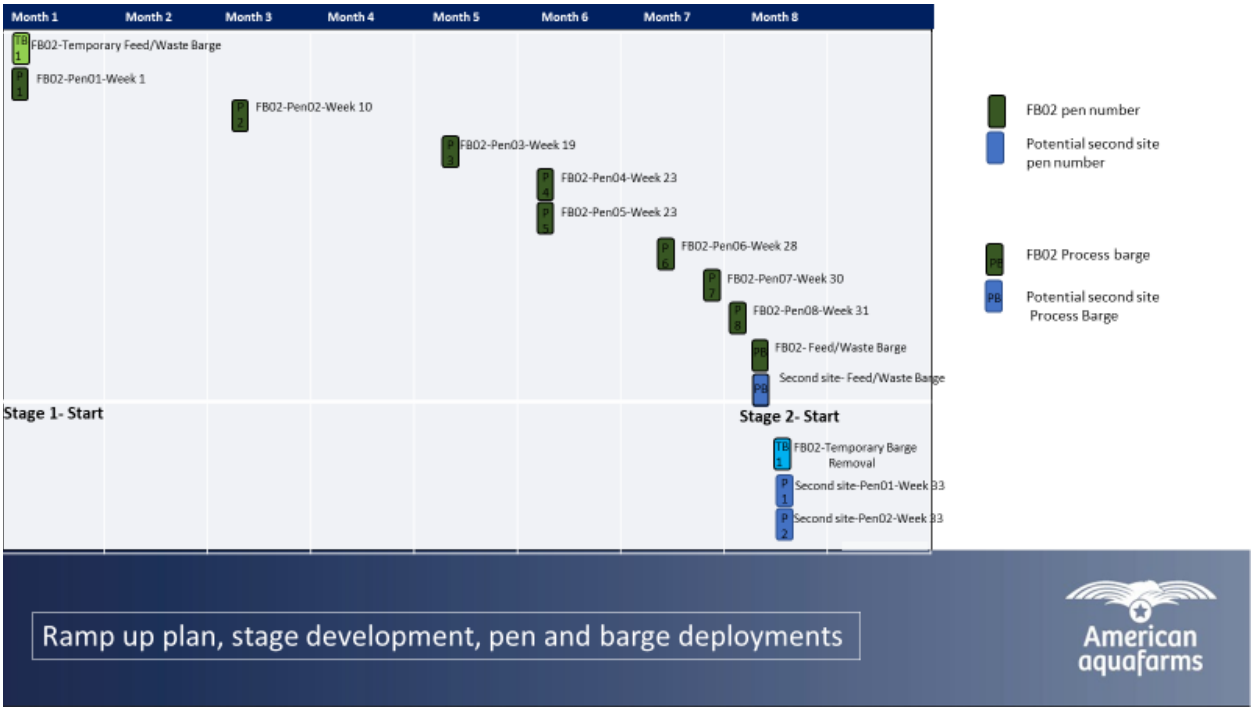
13. Waste is unloaded on-shore for further treatment.

ATTACHMENT 4
CONSTRUCTION SCHEDULE

Initial development of the site with deployment of pens and start of production is expected to start 10 to 12 months from final approval of the lease application. The ramp-up plan, attached, is divided into 3 stages and is based upon envisioning the coordination of operations with a second lease area. Week 1 in the ramp-up plan will correspond with a production start (i.e., approximately 10 to 12 months after final approval of the lease application). A full production cycle from stocking to harvest is forecasted to be completed within 17 to 18 months production start-up.

We expect harvest to begin around month 17 and will at full operation reach a maximum production of approximately 15,000 metric tons per year for the site, which is approximately 1000 metric tons per pen.

The lease site will be stocked with 840,000 – 890,000 pcs fish on average every 18th week. As fish grow and stocking densities reach upper limits, the fish batch will be split into new pens. American Aquafarms intends to contract an external well boat that adheres to regulatory requirements to transfer fish between pens. The target density for small individuals is 1.9 lbs/f^3, while larger individuals (1.5 kg +) will have a target density of 2.2 lbs/f^3 upon transfer/harvesting.



Ramp-up Plan

American Aquafarms

Contents

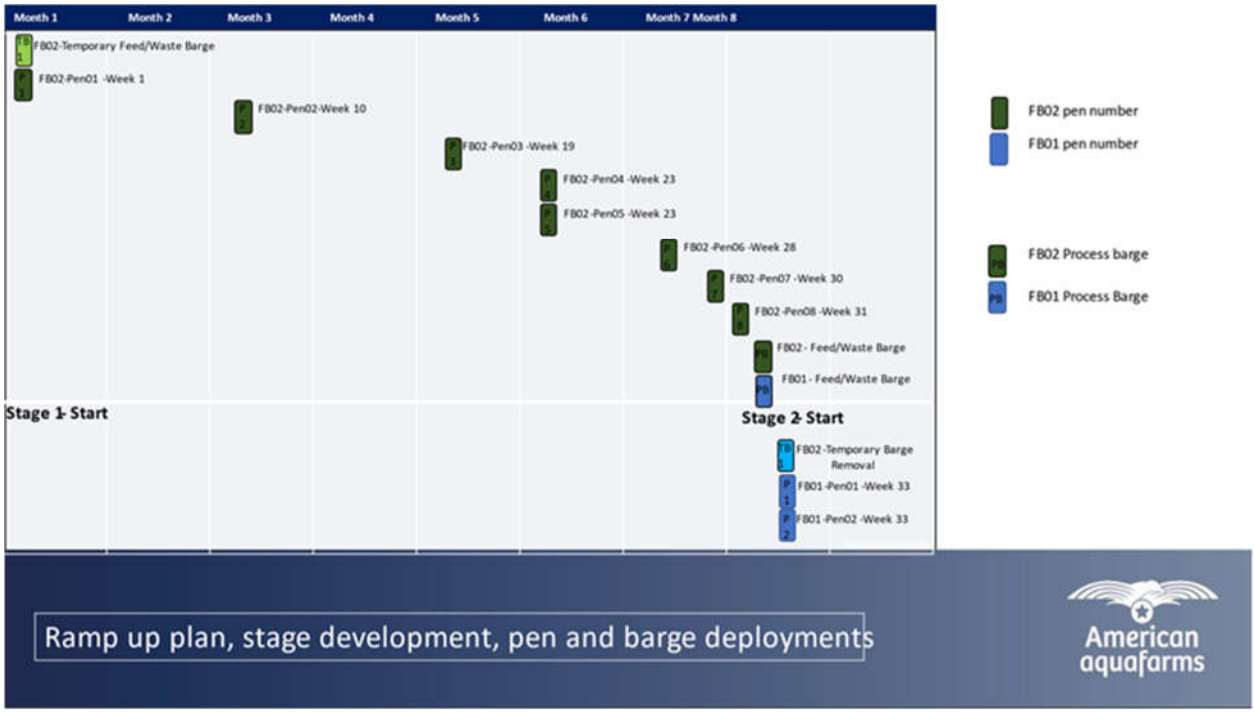
Stages

We have divided the start-up into 3 stages. See ramp-up timeline example below. For illustration purposes we have chosen to let week 1 correspond with the first week of the year in January.

Stage 1

Stage 1 is from week 1 until week 32. In this stage we are going to use a smaller barge just for the waste handling and generators. The feeding is going to be handled by a smaller 50´ service vessel by means of a portable feeder. There will be pens on only one site, and the number of pens will start with 1 and we end up with 8 pens at the end of this stage.

The timeline below shows an example timeline of stage 1 where week 1 is in January for illustration. The timeline shows when the pens are going to be in place at each location.



Temporary Barge

From week 1 a temporary barge will be used to facilitate the first 8 pens. The barge will provide a centralized power source and waste handling.

Size: 90'-130' x 30'-40' (depending on availability) Deck height above water will be about 6'.

The temporary barge will be large enough to accommodate the following equipment.

2pcs 20-foot containerized generator-sets with a 1000gallon fuel capacity

2pcs 40-foot containerized waste treatment units

2pcs 20-foot containerized waste-storage or equivalent tanks/bins

Workspace

Deck Barge

The deck barge needs to have space for at least 2pcs 40-foot containers and 4pcs 20-foot containers, as well as workspace.

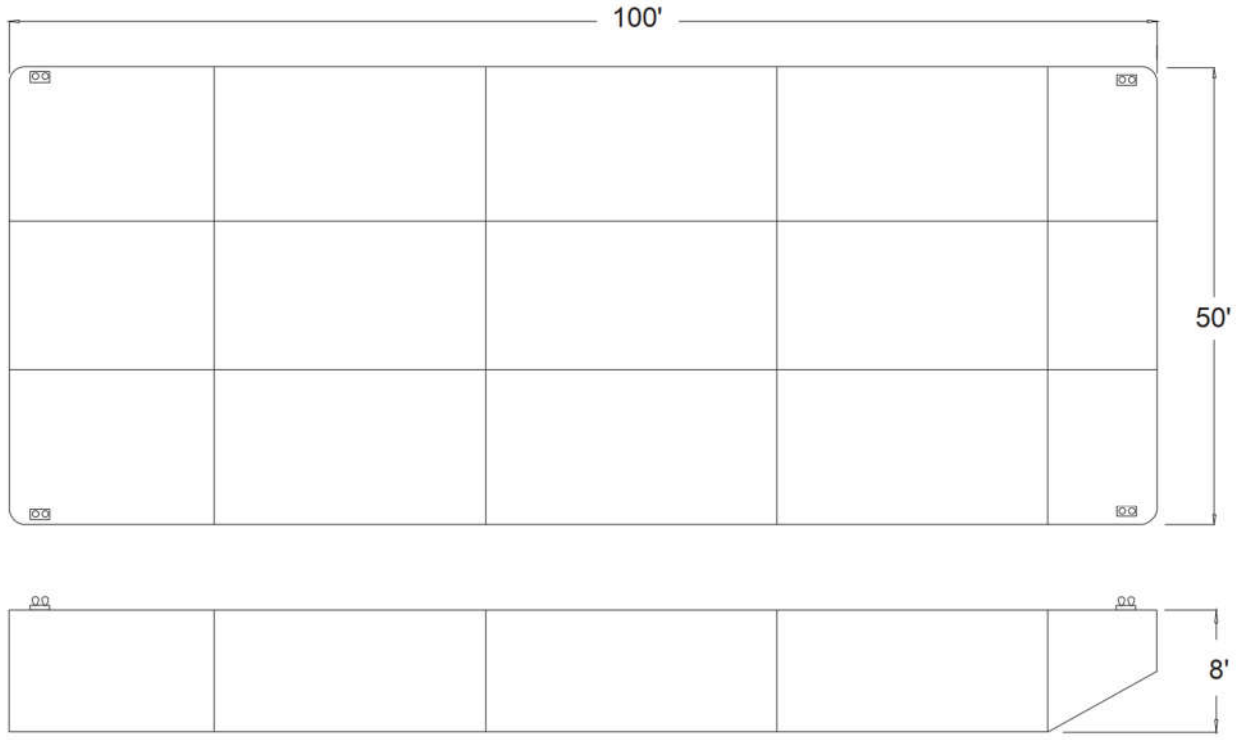
100’ by 50’ is a good size for this operation. See illustration below.

The total height will be:

Deck barge: 8’

ISO containers: 8’6

Height above water: 16’6” – 2’ = 14’6” (4.4 meters)



The containers will be placed on top of the deck barge.

Waste treatment modules

The same type of waste handling modules as in the full scale processing barge is going to be used. See Blue Ocean documentation for details. The modules will be housed in 2pcs 40-foot containers, and the processed waste will be stored on the barge until it is moved to shore by service vessel.

Waste storage

2pcs 20-foot containers or equivalent storage containers.

Generators

Modular silenced diesel generators that have a peak capacity of at least 1000kW/1250kVA 3-phase 400V

2pcs 500kW Silent Generator 20’ ISO container enclosure.

American Aquafarms will undertake maximum effort to reduce generator sound level and mechanical vibrations to the maximum extent practical. The generators will be housed on the feed/process barge in a closed custom unit with a high degree of noise reducing insulation. All efforts to reduce noise from generator operation to a level not intruding on the surroundings will be made. This includes reducing

the sound level of the source by optimizing duration and frequency, installation of acoustic barriers, using acoustic insulation, installing isolation mounts, and cooling air attenuation. The exhausts will have silencers and mufflers to further reduce noise emissions. The generators will be operating at optimal output to minimize noise and achieve best possible running efficiency.

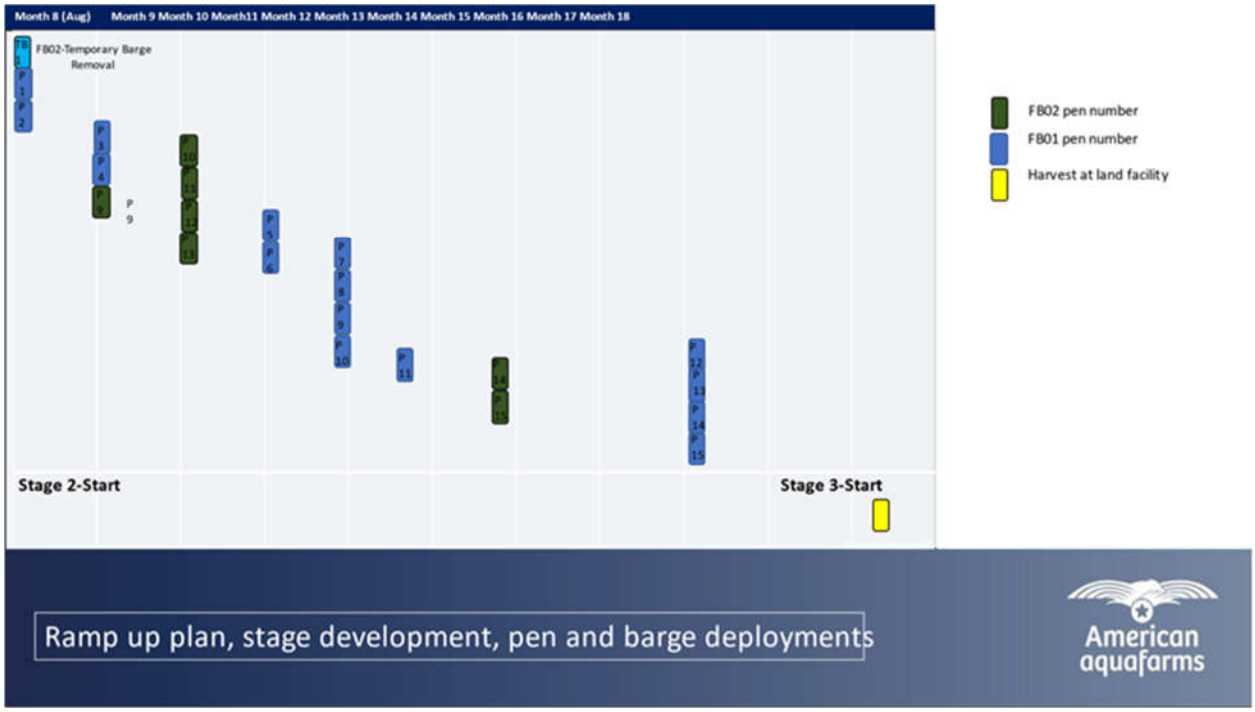
Portable Feeding System

Instead of using a centralized feed barge during Phase 1, we will be using “mobile feeders” that will be operated by the smaller service-vessels. See example of smaller service-vessel with “mobile feeder”:

Stage 2

Stage 2 is from week 32 until month 17. In this stage we are starting to put pens in the second site. And the number of pens will increase from 8 to 30.

The timeline below shows an example timeline of stage 2 and 3, week 1 is in January for illustration.



Processing barges

The temporary barge and portable feeders are replaced by the full-scale processing barge.

Stage 3

Stage 3 is from month 17 until full operation, approximately month 19 or 20. This is when the first harvest is done, and we reach a steady harvest of 500MT per week at the end of this period.

After stage 3 both sites and the on-shore facilities will be in full operation. This will be approximately 20 months after the first pen is in operation.

ATTACHMENT 5
RESPONSE TO QUESTION 18

18. If this application is for a new or increased discharge, include a statement that:

A. describes in detail the nature of and reason for the requested increased in pollutant loading to the receiving water;

The US today imports in excess of 90% of its seafood consumption, and the demand for seafood has been increasing steadily in the US for a number of years and is also expected to continue to rise going forward. The majority of those imports are coming from far away regions of the world and are transported via air freight to the US. This creates a huge carbon footprint that greatly contributes to global environmental concern. Global wild fish capture resources are increasingly stretched above sustainable output levels and several types of fish are becoming rare or close to extinction in some places. Problems arising from overfishing using questionable methods raises additional environmental concerns and the consumer often has a low visibility of and certainty of how and where the food is produced and sourced. Estimated population growth and higher living standards will, over the next few decades, dramatically increase the global demand for high-quality protein. Aquaculture is a highly efficient way to produce protein for human consumption as it requires a much lower feed conversion ratio (Ratio or rate measuring of the efficiency with which the bodies of livestock convert animal feed into the desired output) than much of the land-based farming methods. For example, the feed conversion ratio (FCR) is about 6 times higher for producing beef than salmon and environmental impacts from water and land usage as well as CO2 emissions are also much better for aquaculture.

American Aquafarms is planning to establish a 15,000 MT (30,000 total for two sites) Atlantic salmon production operation in Frenchman Bay, Maine, thus ensuring an environmentally friendly produced food source for the American market that is reliable and can be verified and trusted. The operation will implement know-how from partners and personnel, and design solutions from the Norwegian salmon industry. The company will utilize state-of-the-art rearing technology by producing fish in semi-closed containment systems, also called closed pens. The end-product will be head-on gutted fish and fillets processed at a processing facility. Although an alternatives analysis is ongoing, the preferred alternative for processing is the Maine Fair Trade property in Gouldsboro, Maine. An agreement to purchase the property, following successful permitting of the pens, has been signed. The Gouldsboro facility is also planned to be used as a salmon hatchery; upon approval and completion, this facility will deliver fish to the sea based closed-pen system.

In addition to providing the fish an optimal rearing environment, the use of semi-closed containment system offers the producer a way to sustain the local natural habitat surrounding the production site by continuously collecting and treating particulate waste. As the demand for salmon increases and the industry is moving towards a more environmentally friendly product raised under conditions that maintains animal welfare, it is of the producer's and market's highest interest to implement the best technology available. To this date, all finfish cultured at sea in Maine is produced in traditional open net pens. American Aquafarms will through its project raise the standard of fish farming to meet the increasing requirements from consumer markets while offering knowledge and experience to the local community. Taking care of the environment goes to the core of American Aquafarms' beliefs - and our

proposed operation in Frenchmen Bay will do exactly that, as well as at the same time creating sustainable food production and American jobs.

B. if the Department determines that the discharge will diminish the remaining assimilative capacity of the receiving water, demonstrates that alternative methods to reduce or eliminate the increased discharge are not feasible. Include engineering and economic analyses that consider alternative methods of production, process controls, wastewater minimization methods, improved wastewater treatment methods and alternate disposal sites; and

American Aquafarms is confident that its current plans for operations and discharge represent the best possible solutions and will satisfy the environmental standards set by MEDEP. We will, however, continue to explore and research the development of future technologies enabling even better solutions.

C. if the Department determines that the discharge will diminish the remaining assimilative capacity of the receiving water, demonstrates that the increased pollutant load will result in important social and economic benefits to the State.

The discharge from the American Aquafarms facility does not intend to discharge pollutants. A discussion of near-field and far-field dilution of nutrients from the facility is in the following memo regarding CORMIX modeling and anti-degradation criteria compliance.

400 Commercial Street, Suite 404
Portland, ME 04101
207.772.2891

MEMO

Date: April 8, 2021

To: American Aquafarms

From: Nathan Dill, P.E., Ransom Consulting, LLC

Re: Dilution Analysis for Lease Site FB02

This memorandum describes a dilution analysis to support Maine Pollutant Discharge Elimination System (MEPDES) permitting for the American Aquafarms closed-pen aquaculture system at a proposed 60-acre lease site in Frenchman Bay (FB02), located at 68.209870 degrees west longitude, 44.429970 degrees north latitude. Dilution analysis is described for the discharge of primary water circulated through the fish rearing pens (the "Primary Discharge"), as well as the discharge of treated wastewater from the system's waste processing barge (the "Secondary Discharge"). Dilution analysis was performed using the CORMIX model, Version 12, to estimate Near-Field Region (NFR) dilution factors for acute and chronic exposure for toxic pollutants in accordance with 06-096 CMR Chapter 530 Section 4(A)(2)(a). An analysis of long-term far-field dilution factors is also described to support anti-degradation evaluations associated with potential nutrient impacts and dissolved oxygen in Frenchman Bay.

AMBIENT CONDITIONS

Physical conditions in the ambient environment were characterized based upon in-situ observations made during the summer and fall of 2020. Observations include vertical profiles of conductivity and temperature used to estimate seasonal density stratification of the water column, as well as Acoustic Doppler Current Profiler (ADCP) observations used to characterize the current velocity at the site. Representative seasonal density profiles for a summer stratified condition and a winter unstratified condition are based on monthly water quality monitoring data collected in July through October 2020 and described in the March 3, 2021 report "Water quality Monitoring Report, Frenchman Bay Site No. 2, Hancock County, Maine" Prepared by Ransom Consulting, LLC on behalf of American Aquafarms. ADCP data were collected from a bottom mounted upward looking ADCP deployed at the FB02 site for 23 hours starting on September 17, 2020 at 1:06 pm.

For CORMIX modeling, in-situ density profile observations were used to develop an approximate linear density profile for the summer stratified condition with water density varying from 1023 kg/m^3 at the water surface to 1025 kg/m^3 at the bottom. A representative winter un-stratified condition assumes a constant water column density of 1024 kg/m^3. Ambient current speeds used for near-field dilution analysis were determined by taking the minimum of the observed depth averaged current speed of 6.6 cm/s from the ADCP records as representative of a mean low water (MLW) slack tide current for assessing the dilution factor for acute toxicity and taking the maximum depth averaged current speed of 22.6 cm/s as representative of the mean tide current speed for assessing the chronic dilution factor. Figure 1 shows a time series plot of the depth averaged current speed collected by the ADCP. ADCP data were

also processed by averaging over the semi-diurnal lunar cycle and by classical harmonic analysis[1] on orthogonal velocity components to estimate the net tidal residual current flux for assessing far-field dilution. A water depth of 50 meters was assumed for all analyses, which is representative of the average MLW depth at the site.

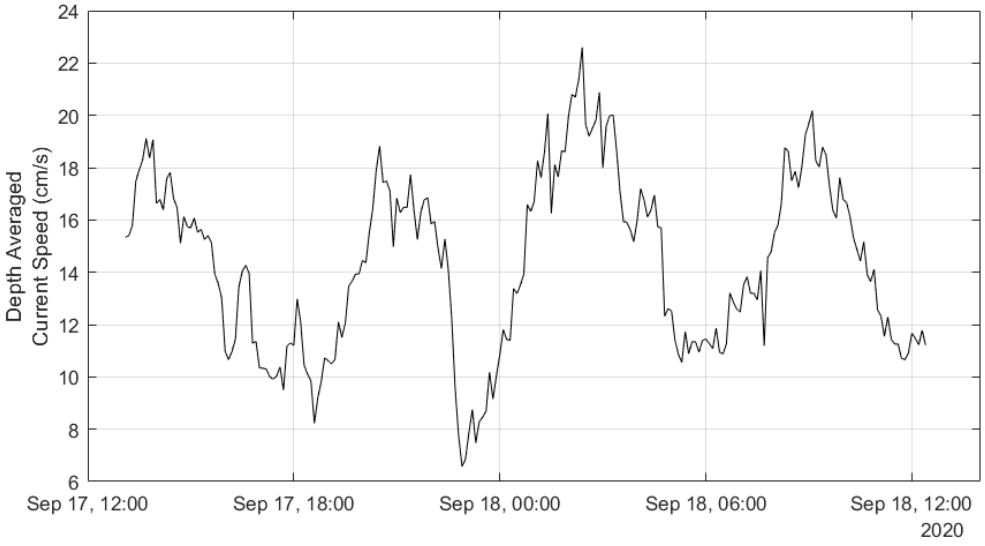


Figure 1. Depth averaged current speed at FB02 from ADCP deployment.

NEAR-FIELD DILUTION

Primary Discharge

Effluent from the primary discharge consists of water that constantly circulated through the fish rearing pens. This water must support healthy fish growth in the pens and therefore it poses minimal risk to aquatic life in the surrounding environment. The primary effluent contains soluble metabolites from fish waste (nutrients) and a fraction of suspended solids that are not captured by the closed pens' waste collection system (i.e. fish feces and feed particles that do not settle to the bottom of the pens).

The proposed system at FB02 is a moored array of fifteen individual pens. Each pen constantly circulates water at a rate of 6 m^3/s (136.9 MGD - US). The total primary discharge rate at FB02 for all fifteen pens is 90 m^3/s (2.05 BGD - US). For CORMIX modeling, the density of the effluent is taken to be 1024 kg/m^3 based on the assumption that intake water is taken from mid-depth in the water column. Each pen discharges primary effluent through a 2.8-meter diameter port that is directed vertically downward 30 meters below the surface.

CORMIX1 single port simulations were performed to evaluate near-field dilution for a single pen. In addition, CORMIX2 multi-port diffuser simulations with a 15-port, 300-meter length, diffuser were performed to evaluate the dilution the entire multi-pen system. CORMIX results indicate that multi-port diffuser simulations provide a more reasonable evaluation of the actual behavior of the discharge plume when considering that the horizontal near-field dimensions predicted by CORMIX for a single port

[1] Pawlowicz, R., B. Beardsley, and S. Lentz, "Classical Tidal Harmonic Analysis Including Error Estimates in MATLAB using T_TIDE", Computers and Geosciences, 28 (2002), 929-937.

discharge are of the same order as the spacing between pens, the overall width of the pen arrays is greater than the depth at the site, and the total momentum injected into the ambient flow by the diffuser is hydrodynamically important in the mixing processes. Thus, we recommend results from the multi-port diffuser simulations be used to evaluate near-field dilution criteria.

In general, the CORMIX model is based upon an assumption of a "deeply submerged" discharge into the waterbody. In this context, the CORMIX model limits its applicability to cases where the discharge port must be located within the lower one third of the water column. CORMIX is also able to simulate "near-surface" discharges with the discharge port in the upper one third of the water column by logically inverting the density stratification and taking a mirror image of the results from a deeply submerged simulation. In this case, where the proposed discharge is at 30 meters depth within a 50-meter-deep waterbody, within the middle one third of the water column, CORMIX will not provide a direct solution. Instead, CORMIX guidance[2] recommends evaluating three alternative cases with revised waterbody and/or discharge port depths, so that results can be obtained. CORMIX also limits the vertical angle of the discharge to be no less than 45^{o} toward nearest water surface or water bottom boundary. Thus, we have treated the primary discharge as a near-surface discharge to allow for simulation of vertically downward discharge ports. Because the system is simulated as a near-surface discharge, the alternative cases to overcome the deeply submerged assumption must be logically inverted from the way they are described in the CORMIX guidance. The recommended alternative cases have been simulated as follows:

1. Case i): Assume the water surface lies lower so that the port elevation below the surface is equal to one third of the reduced waterbody depth. To simulate this alternative case the waterbody depth is reduced to 30 meters and the discharge elevation is maintained at 20 meters above the bottom.

2. Case ii): Assume the water bottom is sufficiently lower so that the port elevation below the surface is equal to one third of the increased waterbody depth. To simulate this alternative case the waterbody depth was increased to 90 meters and the discharge elevation below the surface is maintained at 30 meters.

3. Case iii): Assume the actual discharge port elevation is of secondary importance, maintaining the actual waterbody depth and reduce the distance between the discharge and the surface so it is equal to one third of the waterbody depth. To simulate this case the waterbody depth is maintained at 50 meters and the discharge elevation is increased to 16.66 meters below the surface.

Several simulations were conducted considering two seasonal stratifications, two tidal current speeds, and the three alternative depth cases described above. This results in a total of 12 simulations for the single pen discharge. Results summarizing the predicted CORMIX flow classification, NFR dilution, horizontal extent of the near-field, and discharge travel time to the edge of the NFR, for the single pen discharge are summarized in Table 1 through Table 3 for the three alternative waterbody depth cases, respectively. CORMIX session reports and prediction files for the primary discharge single port simulations are provided in Attachment A.

For the multi-port diffuser, it is also necessary to consider the direction of the current relative to the orientation of the diffuser, requiring a total of 24 simulations to evaluate cases where the current is flowing parallel or perpendicular to the diffuser orientation. Results summarizing the predicted CORMIX flow classification, NFR dilution, horizontal extent of the near-field, and discharge travel time to the edge

[2] See Section 7.4.2.2 in: Jirka, G., R. Doneker, and T. Barnwell, Jr. "CORMIX: AN EXPERT SYSTEM FOR MIXING ZONE ANALYSIS". U.S. EPA, Washington, D.C., 1991.

of the NFR, for the diffuser simulations are summarized in Table 4 through Table 6 for the three alternative waterbody depth cases, respectively. CORMIX predicts five different flow classifications that may occur as ambient conditions vary with the tidal currents and seasonal stratification. Flow classes are illustrated in Figure 2. CORMIX session reports and prediction files for the primary discharge multi-port diffuser simulations are provided in Attachment B.

The multi-port diffuser simulations predict IMU flow classes (IMU8 and IMU9) for the unstratified conditions, and for the case i (reduced depth) stratified conditions. For these simulations, the NFR is described as hydrodynamically unstable and fully vertically mixed, leading to relatively high dilution at the edge of the NFR. Typically, the reported near-field dilution and near-field extent given in the tables below is corresponds to the edge of the NFR. However, for some IMU cases, CORMIX predictions describe a large NFR, based on the model's steady-state assumptions, that would not likely develop within tidal environment with dynamic currents. For these cases we give the dilution at 15 minutes travel time as a representative near-field dilution, rather than the dilution at the edge of the unreasonably large NFR.

The multi-port diffuser simulations predict IMS flow classes (IMS1, IMS2, and IMS3) for the stratified conditions under case ii and case iii. These flow classes predict trapping of the discharge within the ambient stratification, which tends to reduce the near-field dilution when compared to unstratified conditions, or case i with the shallower depth. For these cases, the tables below report the dilution, horizontal distance, and travel time to the point of terminal rise where the plume meets the trapping level in the stratified ambient. The dilution at this point is generally less than the dilution CORMIX reports at the edge of the NFR and is appropriate value to use for assessing chronic and acute toxicity criteria in under 06-096 CMR Chapter 530 Section 4(A)(2)(a).

CORMIX modeling indicates that the lowest near-field dilution would occur during unstratified conditions for the case i during low water slack current, yielding a dilution factor 4.5 for evaluating acute toxicity criteria. During mid-tide current the results indicate a minimum dilution factor of 8.3 for evaluating chronic toxicity criteria. The recommended acute and chronic dilution factors are highlighted in yellow and green, respectively.

Table 1. Single Port Simulation Summary, Case i

Stratification	Tide	Flow Class	Near-field Dilution	Near-Field Extent (m) [Travel Time (s)]
Winter Unstratified	Low Slack	IPV4	1.8	31 m, [461 s]
Summer Stratified	Low Slack	IV4	1.8	31 m, [461 s]
Winter Unstratified	Mid-Tide	IPV3	5.5	16 m, [59 s]
Summer Stratified	Mid-Tide	IV2	4.7	42 m, [173 s]

Table 2. Single Port Simulation Summary, Case ii

Stratification	Tide	Flow Class	Near-field Dilution	Near-Field Extent (m) [Travel Time (s)]
Winter Unstratified	Low Slack	IPV3	8.8	28 m, [331 s]
Summer Stratified	Low Slack	IS2	6.3	40 m, [504 s]
Winter Unstratified	Mid-Tide	IPV3	53.1	410 m, [1681 s]
Summer Stratified	Mid-Tide	IS1A3I	7.4	87 m, [174 s]

Table 3. Single Port Simulation Summary, Case iii				
Stratification	**Tide**	**Flow Class**	**Near-field Dilution**	**Near-Field Extent (m) [Travel Time (s)]**
Winter Unstratified	Low Slack	IPV4	3.1	53 m, [782 s]
Summer Stratified	Low Slack	IV4	2.8	53 m, [785 s]
Winter Unstratified	Mid-Tide	IPV3	15.3	56 m, [208 s]
Summer Stratified	Mid-Tide	IS1A3I	5.9	77 m, [144 s]

Table 4. Diffuser Simulation Summary, Case i

Stratification	**Tide**	**Diffuser-Current Alignment**	**Flow Class**	**Near-field Dilution**	**Near-Field Extent (m) [Travel Time (s)]**
Winter Unstratified	Low Slack	Parallel	IMU9	24	225 m, [216 s]
Summer Stratified	Low Slack	Parallel	IMU9	24	225 m, [216 s]
Winter Unstratified	Low Slack	Perpendicular	IMU8	4.5 ¥	30m, [900 s]
Summer Stratified	Low Slack	Perpendicular	IMU8	30	225 m, [216 s]
Winter Unstratified	Mid-Tide	Parallel	IMU9	24	225 m, [187 s]
Summer Stratified	Mid-Tide	Parallel	IMU9	24	225 m, [187 s]
Winter Unstratified	Mid-Tide	Perpendicular	IMU8	22.6	75 m, [663 s]
Summer Stratified	Mid-Tide	Perpendicular	IMU8	30	225 m, [187 s]

¥ CORMIX results show NFR that is unreasonably large for tidal environments, representative near-field dilution is taken at 15 minutes travel time.

Table 5. Diffuser Simulation Summary, Case ii					
Stratification	**Tide**	**Diffuser-Current Alignment**	**Flow Class**	**Near-field Dilution**	**Near-Field Extent (m) [Travel Time (s)]**
Winter Unstratified	Low Slack	Parallel	IMU9	72	675 m, [649 s]
Summer Stratified	Low Slack	Parallel	IMS3	7.7 ¥	43 m, [225 s]
Winter Unstratified	Low Slack	Perpendicular	IMU8	7.8 ¥	30 m, [900 s]
Summer Stratified	Low Slack	Perpendicular	IMS3	6.2 ¥	72 m, [193 s]
Winter Unstratified	Mid-Tide	Parallel	IMU9	72	675 m, [562 s]
Summer Stratified	Mid-Tide	Parallel	IMS2	8.6 ¥	75 m, [233 s]
Winter Unstratified	Mid-Tide	Perpendicular	IMU8	45.9 ¥	102 m, [900 s]
Summer Stratified	Mid-Tide	Perpendicular	IMS1	12.5 ¥	214 m, [569 s]

¥ Dilution is taken at the point of terminal rise in stratified ambient, which is lower than predicted dilution at edge of NFR

¥ CORMIX results show NFR that is unreasonably large for tidal environments, representative near-field dilution is taken at 15 minutes travel time.

Table 6. Diffuser Simulation Summary, Case iii					
Stratification	**Tide**	**Diffuser-Current Alignment**	**Flow Class**	**Near-field Dilution**	**Near-Field Extent (m) [Travel Time (s)]**
Winter Unstratified	Low Slack	Parallel	IMU9	40	375 m, [360 s]
Summer Stratified	Low Slack	Parallel	IMU9	40	375 m, [360 s]
Winter Unstratified	Low Slack	Perpendicular	IMU8	5.9 ¥	30 m, [900 s]
Summer Stratified	Low Slack	Perpendicular	IMU8	50	375 m, [360 s]
Winter Unstratified	Mid-Tide	Parallel	IMU9	40	375 m, [312 s]
Summer Stratified	Mid-Tide	Parallel	IMS2	8.3 ¥	67 m, [202 s]
Winter Unstratified	Mid-Tide	Perpendicular	IMU8	34 ¥	101 m, [900 s]
Summer Stratified	Mid-Tide	Perpendicular	IMS1	9.6 ¥	155 m, [375 s]

¥ Dilution is taken at the point of terminal rise in stratified ambient, which is lower than predicted dilution at edge of NFR.

¥ CORMIX results show NFR that is unreasonably large for tidal environments, representative near-field dilution is taken at 15 minutes travel time.

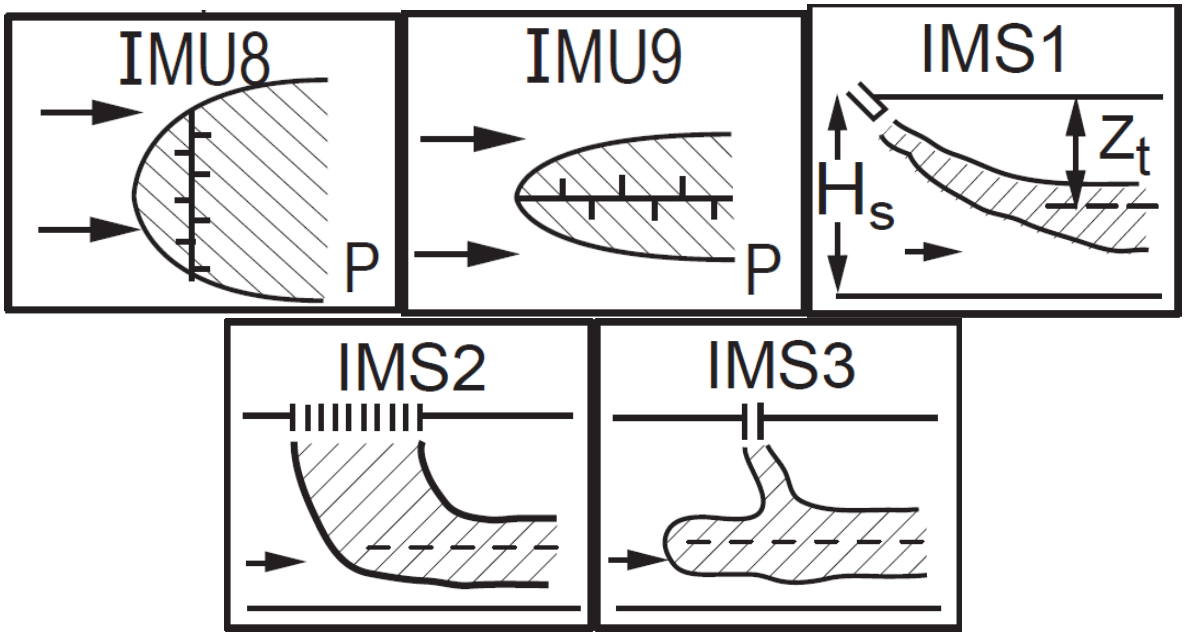


Figure 2. CORMIX flow classes predicted for primary discharge multi-port diffuser simulations. IMU classes are shown as plan views of a fully vertically mixed plume. IMS flow classes are shown as vertical cross-sections of plume through the center of the diffuser parallel to the ambient current. Arrows indicate current direction.

Secondary Discharge

The secondary discharge comes from a waste processing barge that collects and combines sediment from the bottom of all 15 pens and removes the solids before discharging the remaining water to the bay. The effluent from the waste barge also contains a small volume of freshwater (0.2 m^3/hr) that is used in the waste processing. This reduces the density of the effluent slightly, compared to the density of the primary

discharge. The secondary discharge flow rate is 0.0078 m^3/s (0.18 MGD). The density of the secondary discharge is assumed to be 1023.85 kg/m^3, based on the assumption that wastewater from the pens has the same density as the ambient waterbody at mid-depth.

Understanding that there is some flexibility in the design of the secondary discharge outfall, we applied CORMIX to 27 design cases with varying discharge port diameters (2-inches, 2.25-inches, and 3-inches), discharge depths (3 m, 5m, and 10m), and vertical orientation angles (horizontal, 45° downward, and vertically downward). Each of the design cases was simulated for MLW slack current and Mid-Tide current, stratified and unstratified ambient conditions, and co-flowing, counter-flowing, and perpendicular current directions, resulting in a total of 252 CORMIX simulations. To objectively compare the performance of the 27 design cases the dilution at 15 minutes travel time was extracted from the CORMIX prediction files for each simulation and the average dilution and minimum dilution over all ambient conditions was determined. Results of the design analysis are shown in Table 7, sorted from highest to lowest minimum dilution. From this comparison we recommend the design case with a 2-inch diameter port, at 3 meters below the water surface, directed 45° downward. Performance is nearly as good for same port diameter and orientation angle at discharge depths of 5 meters or 10 meters.

Table 8 summarizes the near-field dilution predicted for the recommended design case. CORMIX predicts three different flow classifications depending on the ambient stratification condition and current direction. The flow classes are illustrated in Figure 3. The IS1 flow class is predicted during summer stratified conditions. The IPH flow classes are predicted for times with unstratified ambient conditions. CORMIX does not provide a solution for the IPH5 flow class, which is predicted for counter-flowing currents during times with unstratified ambient. In general, the IPH5 flow class is characterized as hydrodynamically unstable with potential for surface attachment, ambient blocking, development of re-circulating eddies, and a tendency to full vertical mixing. Because this flow class tends to full vertical mixing, and because counter-flowing currents would not occur consistently through time, it is unlikely that minimum dilution would result for cases with the IPH5 flow class.

The recommended dilution factor for acute toxicity criteria is 147, which is taken as the minimum dilution value for all cases with low slack currents. For the chronic dilution factor we consider tidally averaged current direction. Thus, the recommended dilution factor for chronic toxicity is 221, which is determined as the minimum seasonal dilution averaged over the three current direction simulations. The recommended acute and chronic dilution factors are highlighted Table 8 in yellow and green, respectively. CORMIX session reports and prediction files for the recommend design cases are provided in Attachment C. Session reports and prediction files for all design alternative simulations are provided in digital format.

Table 7. Average and Minimum Dilution at 15-minutes travel time for all tested outfall configurations, averaged/minimized over all ambient current speeds, current directions, and stratification conditions.

Vertical Angle	Port Depth (m)	Port Diameter(in)	Mean Dilution at 15-min	Minimum Dilution at 15-min
45° Down	3m	2-in	388.4	186.9
45° Down	5m	2-in	392.5	186
45° Down	10m	2-in	391.2	185.3
45° Down	3m	2.25-in	333.2	162.7
45° Down	5m	2.25-in	332.3	162.6
45° Down	10m	2.25-in	342.3	161.4
Horizontal	5m	2-in	416.8	130.2
45° Down	3m	3-in	239.5	118.2

Vertical Angle	Port Depth (m)	Port Diameter(in)	Mean Dilution at 15-min	Minimum Dilution at 15-min
45° Down	5m	3-in	241	117.5
45° Down	10m	3-in	238.3	116.1
Horizontal	5m	2.25-in	346.7	115.3
Horizontal	10m	2.25-in	335.7	113
90° Down	3m	2-in	285	106.1
90° Down	5m	2-in	294.4	105
90° Down	10m	2-in	292.4	102.4
90° Down	3m	2.25-in	256.8	95.2
90° Down	5m	2.25-in	255.9	94.2
90° Down	10m	2.25-in	253.4	91
90° Down	3m	3-in	202.6	76.8
Horizontal	3m	3-in	295.3	76.1
Horizontal	5m	3-in	262.9	75.3
Horizontal	10m	3-in	251.8	75.3
90° Down	5m	3-in	201.4	75.2
90° Down	10m	3-in	198.4	71.2
Horizontal	3m	2-in	230.7	59.8
Horizontal	3m	2.25-in	207.9	50.1
Horizontal	10m	2-in	364.8	49.7

Table 8. Waste barge discharge dilution summary for design case with a 2-inch diameter port at 3 meters depth with 45° downward orientation.

Stratification	Tide	Flow Direction	Flow Class	Near-field Dilution	Near-Field Extent (m) [Travel Time (s)]
Winter Unstratified	Low Slack	Co-flow	IPH4	366 ¥	82 m, [900 s]
Summer Stratified	Low Slack	Co-flow	IS1	194	21 m, [168 s]
Winter Unstratified	Low Slack	Counter-flow	IPH5 +	NA	NA
Summer Stratified	Low Slack	Counter-flow	IS1	147	9 m, [175 s]
Winter Unstratified	Low Slack	Perpendicular	IPH4	354 ¥	70 m, [900 s]
Summer Stratified	Low Slack	Perpendicular	IS1	210	16 m, [181 s]
Winter Unstratified	Mid-Tide	Co-flow	IPH4	463 ¥	221 m, [900 s]
Summer Stratified	Mid-Tide	Co-flow	IS1	284	45 m, [160 s]
Winter Unstratified	Mid-Tide	Counter-flow	IPH5 +	NA	NA
Summer Stratified	Mid-Tide	Counter-flow	IS1	110	18 m, [80 s]
Winter Unstratified	Mid-Tide	Perpendicular	IPH4	427 ¥	224 m, [900 s]
Summer Stratified	Mid-Tide	Perpendicular	IS1	269	41 m, [165 s]
Mean Dilution for Summer Mid-Tide Simulations				221	35 m, [135 s]
Mean Dilution for Winter Mid-Tide Simulations				445	223 m, [900 s]

¥ Dilution is taken at the point of terminal rise in stratified ambient, which is lower than predicted dilution at edge of NFR.

[¥] CORMIX results show NFR that is unreasonably large for tidal environments, representative near-field dilution is taken at 15 minutes travel time.
[+] CORMIX does not provide simulation results for the IPH5 flow class. In general, the IPH5 flow class is characterized as hydrodynamically unstable near-field that tends toward full vertical mixing.

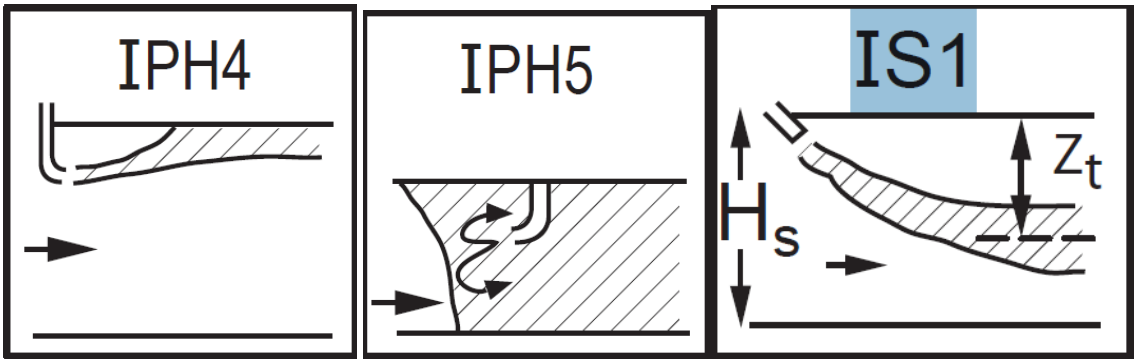


Figure 3. CORMIX flow classes predicted for the secondary discharge simulations.

FAR-FIELD DILUTION

An estimate of far-field dilution for the proposed discharges can be estimated as the ratio of the discharge flow rate to the net tidal residual flux of ambient water that passes through the site. Two different approaches were taken to estimate tidal residual flux based on the ADCP observation.

The first approach is based on a simple semi-diurnal average of the current velocity. The ADCP observations were separated into east and north components for each depth bin and time record. The separated components were then averaged over the dominant 12.4-hour lunar semi-diurnal (M2) tidal period to remove the influence of M2 tidal fluctuations from the data. The averaged velocity components were then re-combined to estimate the tidal residual current speed within each depth bin, and then averaged over the depth to estimate the depth averaged tidal residual current at the site. To estimate the tidal residual flux passing through the site the residual current speed is then multiplied by the average site depth of 50 meters and a representative site width of 556 meters (the diameter of a 60-acre circle). For this analysis, the upper 4 meters of current velocity observations were ignored to remove the influence of wind from the tidal residual flux estimation and produce a more conservative evaluation of site conditions.

The estimation of M2-averaged tidal residual flux passing the lease site is illustrated in the following figures. Figure 4 and Figure 5 show the observed current speed and direction from the ADCP deployment, respectively. Figure 6 and Figure 7 show the eastward and northward velocity components of the ADCP observations, respectively. Figure 8 and Figure 9 show the M2-averaged eastward and northward residual velocity components, respectively. Figure 10 and Figure 11 show the re-combined M2-averaged current speed and direction, respectively. Figure 12 shows a vertical profile of the overall time-averaged and M2-averaged current velocity, the depth averaged residual current speed, and dilution factor calculations for the primary and secondary discharges. The results show an average tidal residual current speed of 3.0 cm/s, yielding a tidal residual flux of 914 m^3/s passing the lease site. This results in far-field dilution factor of 10 for the primary discharge, and a far-field dilution factor of 118,000 for the secondary discharge.

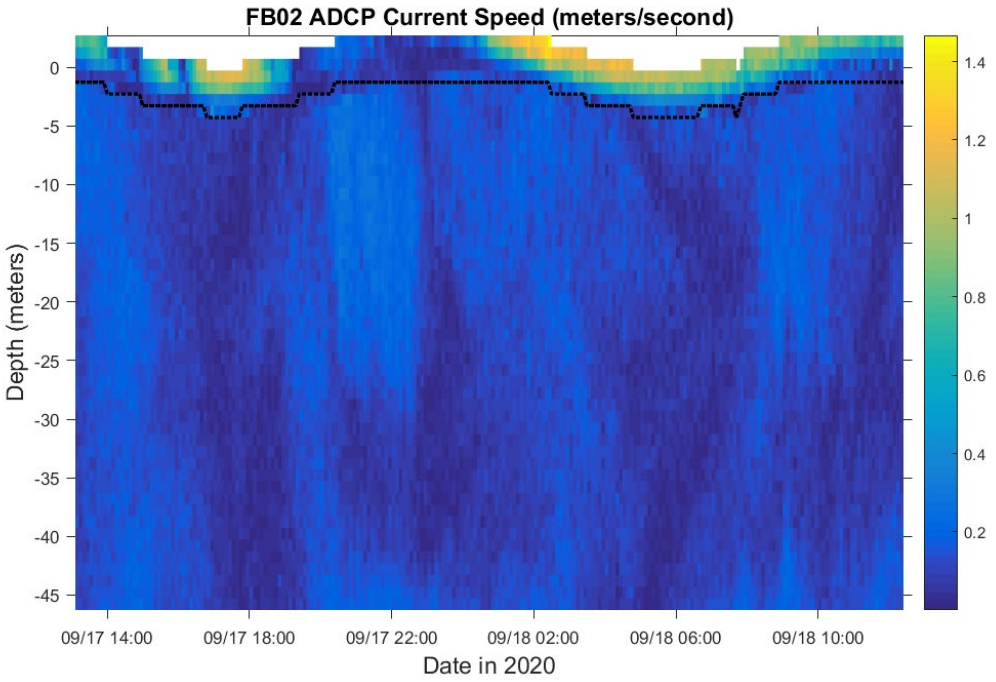


Figure 4. Observed current speed.

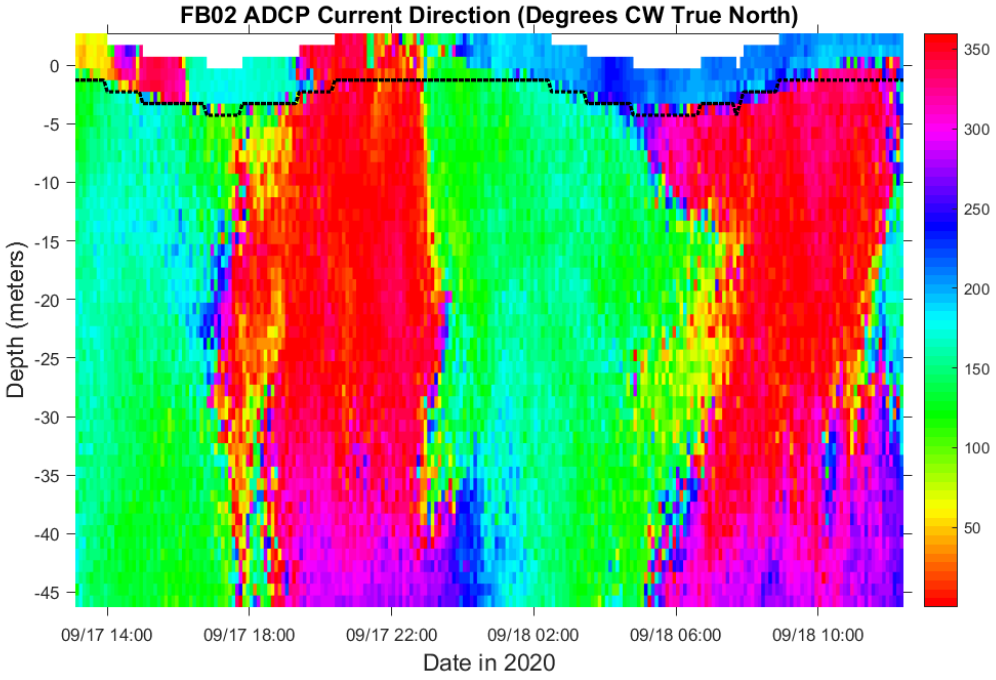


Figure 5. Observed current direction.

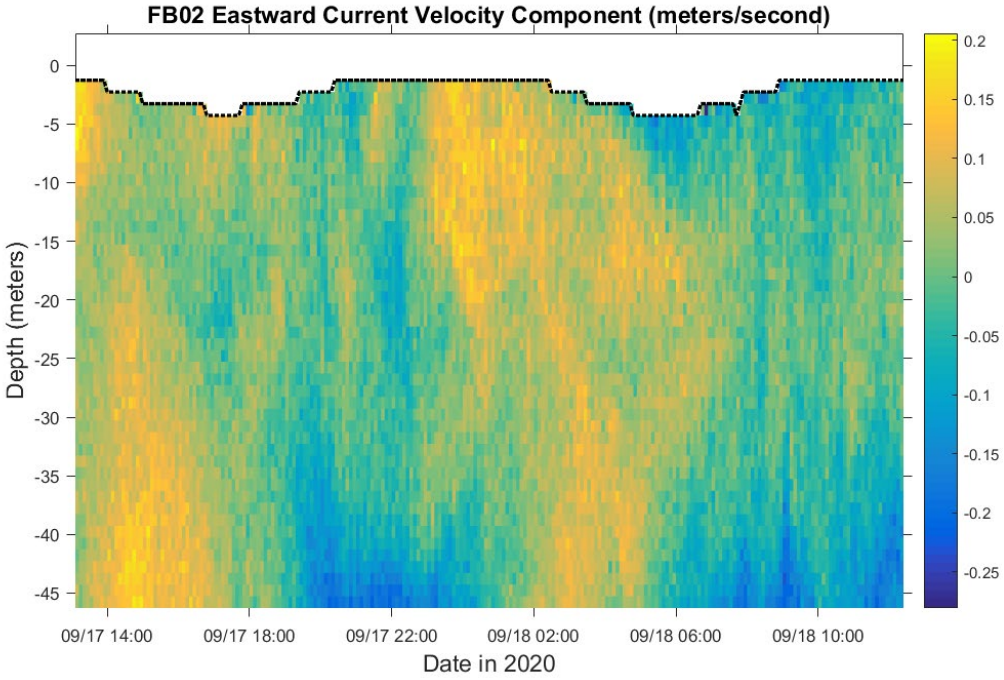


Figure 6. Eastward component of current velocity.

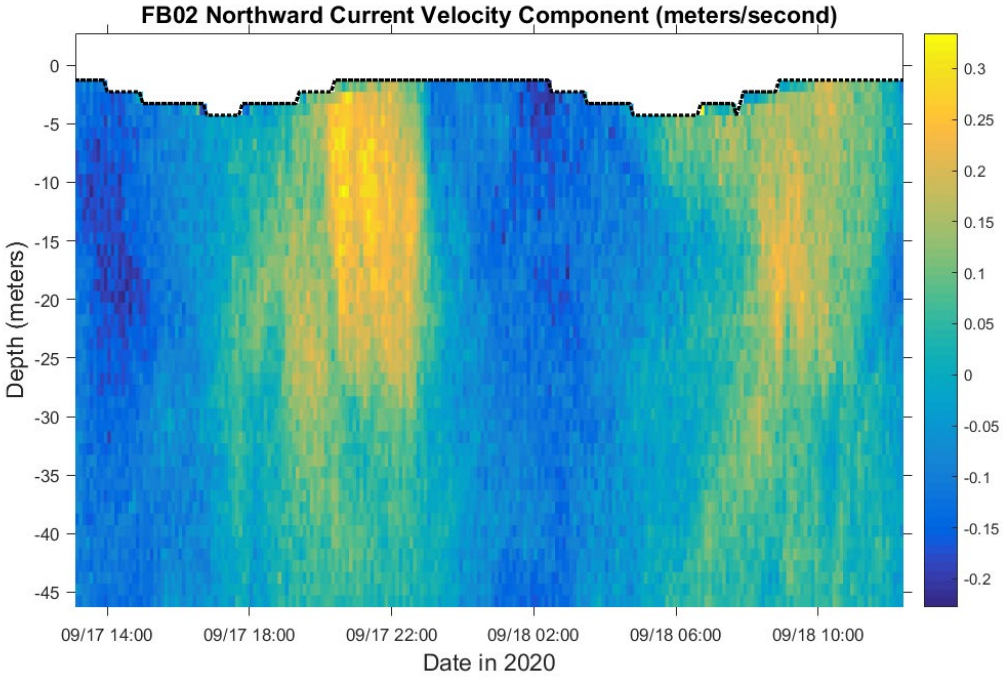


Figure 7. Northward component of current velocity.

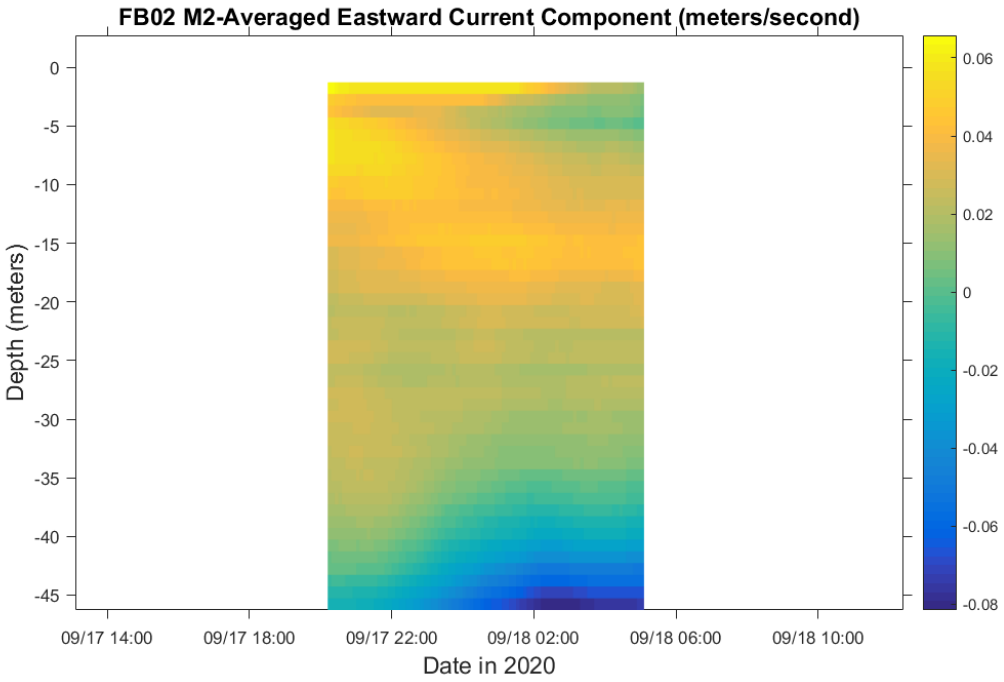


Figure 8. M2-averaged eastward component of current velocity.

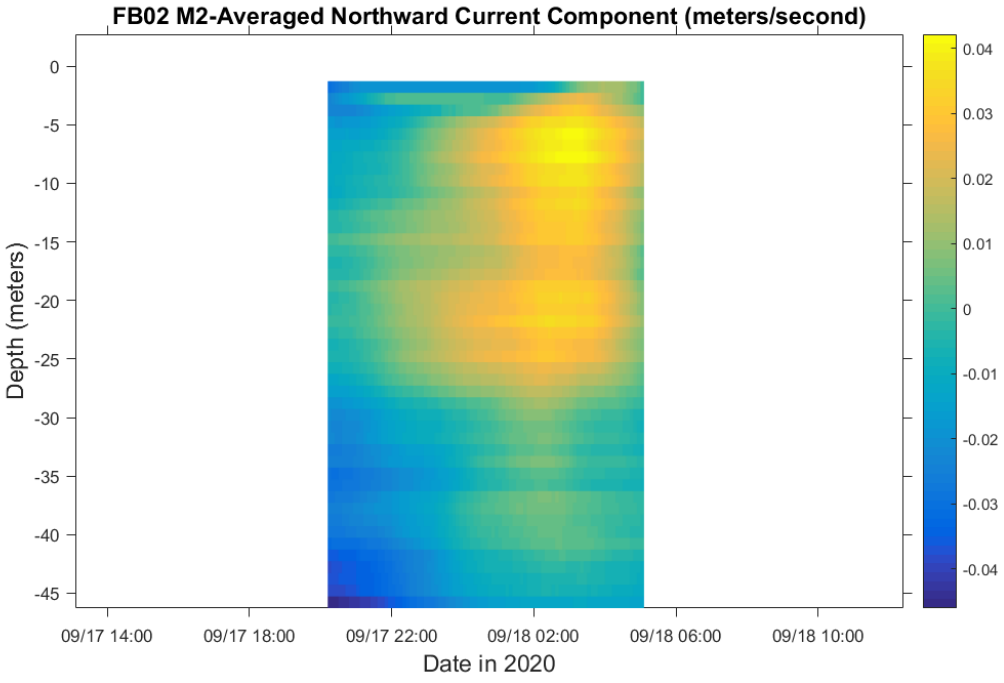


Figure 9. M2-averaged northward component of current velocity.

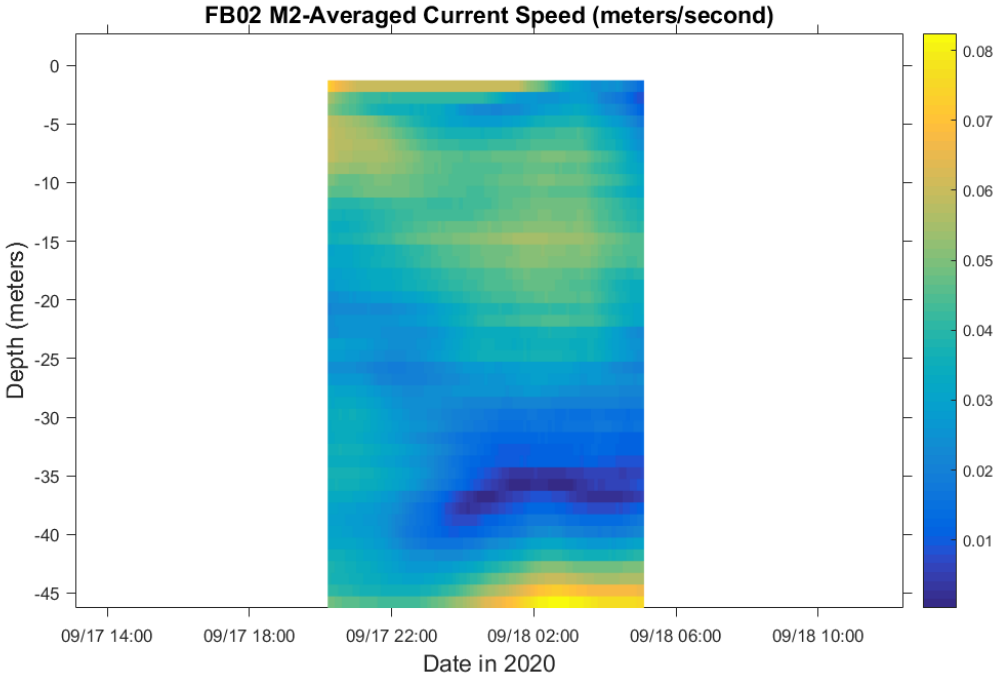


Figure 10. M2-averaged current speed.

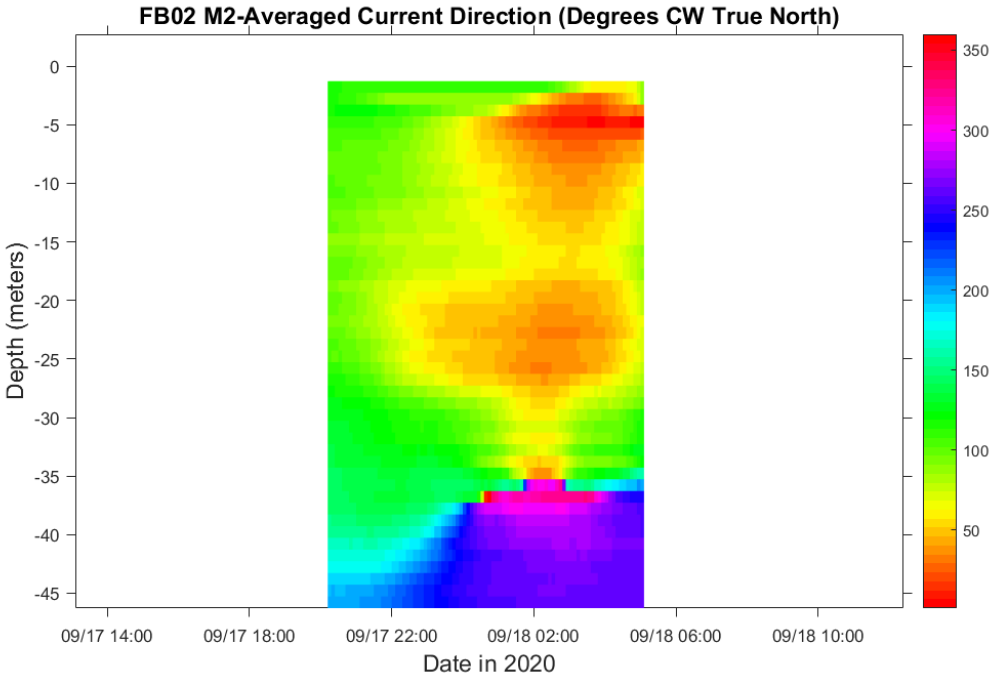


Figure 11. M2-averaged current direction.

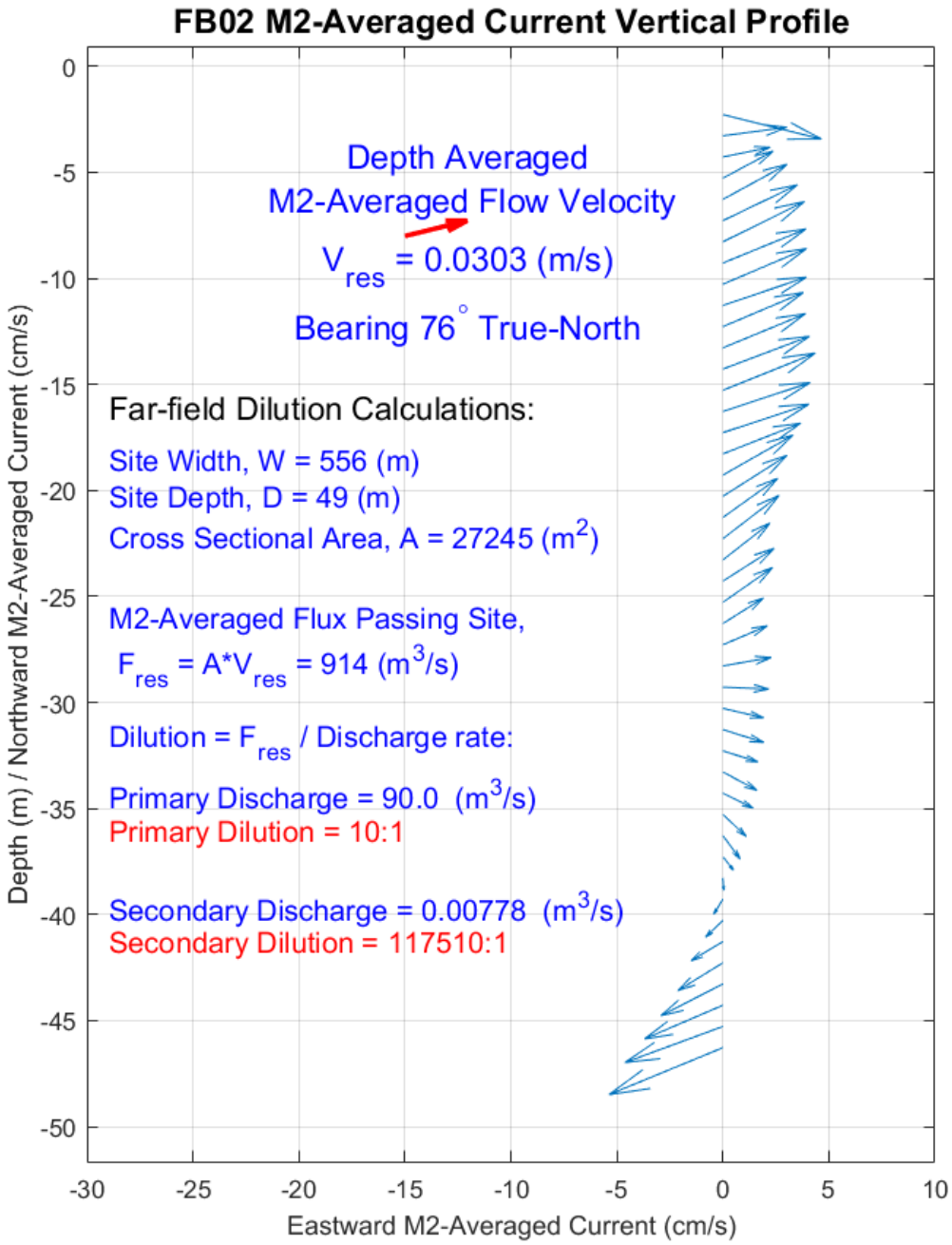


Figure 12. Vertical profile of time averaged, M2-averaged current and far-field dilution calculations.

The second approach to estimate the tidal residual flux passing the site is based on a classical harmonic analysis of the current velocity. The ADCP data were separated into eastward and northward velocity components as shown in Figure 6 and Figure 7. The velocity components were processed with the Matlab package t_tide[3] to determine amplitude and phase of the primary diurnal and semi-diurnal tidal constituents. In order for the harmonic analysis to resolve the diurnal tide, the 23-hour current time series was extended to 25 hours by linear extrapolation of one hour of data at the beginning and one hour at the end of the observed time series prior to the harmonic analysis. The tidal constituents are used to generate a timeseries of predicted tidal currents for the observation period, which were subtracted from the observed current velocity and averaged over the observation period to determine the tidal residual velocity for each depth bin. The upper 4 meters of the water column are excluded from this analysis to limit the effect of wind on the estimation of the tidal residual. Figures illustrating the harmonic analysis and residual current velocity estimation for each depth bin are provided in Attachment D. Figure 13 shows a vertical profile of the overall harmonic residual current velocity, the depth averaged residual current speed, and dilution factor calculations for the primary and secondary discharges. The results of the harmonic analysis yield a depth averaged tidal harmonic residual current speed of 3.9 cm/s and residual flux of 1054 m^3/s passing the site. This gives a far-field dilution factor of 12 for the primary discharge and a far-field dilution factor of 136,000 for the secondary discharge.

Both approaches to estimating the tidal residual flux at the site yield similar results. Based on these analyses, we recommend using a dilution factor of 11 for the primary discharge and a dilution factor of 126,900 for the secondary discharge to evaluate anti-degradation criteria associated with long-term far-field nutrient and dissolved oxygen impacts of the proposed discharges to Frenchman Bay.

[3] Pawlowicz, R., B. Beardsley, and S. Lentz, "Classical Tidal Harmonic Analysis Including Error Estimates in MATLAB using T_TIDE", Computers and Geosciences, 28 (2002), 929-937.

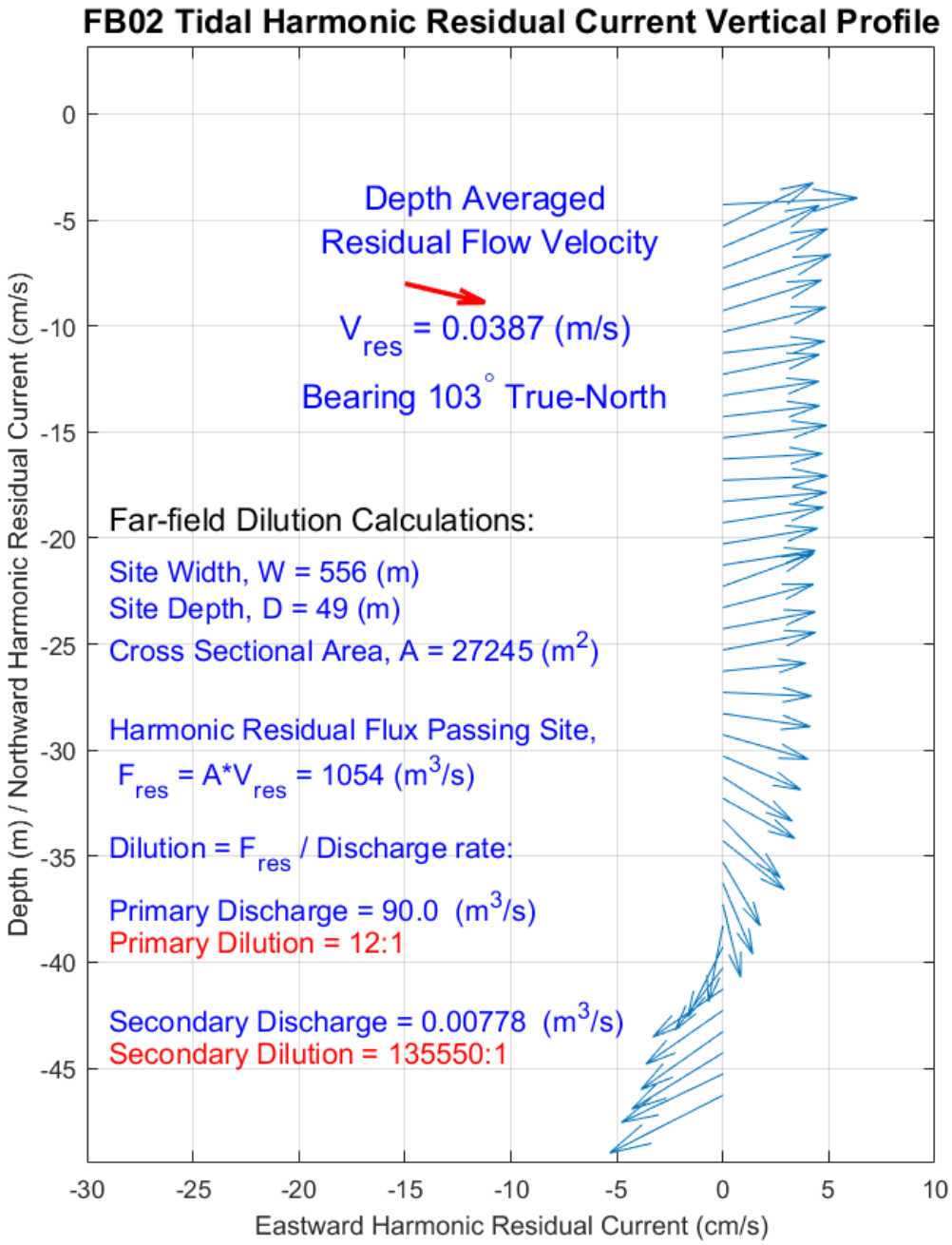


Figure 13. Vertical profile of tidal harmonic residual current and far-field dilution calculations.

SUMMARY OF RECOMMENDED DILUTION FACTORS

Primary Discharge

Near-Field Dilution

The FB02 primary discharge does not propose discharge of toxic pollutants that would require evaluation of concentrations for acute or chronic toxicity. However, if future needs arise to evaluate concentration criteria for toxic pollutants in the FB02 primary discharge, we recommend the following dilution factors listed in Table 9.

Table 9. Recommended near-field dilution factors for FB02 primary discharge.

Tidal Current	Dilution Factor	Toxicity
MLW slack	4.5	Acute
Mid-tide	8.3	Chronic

Far-field dilution

To aid in evaluation of waterbody anti-degradation criteria for the FB02 primary discharge we have estimated far-field dilution by calculating the tidal residual volume flux of water passing through the lease site and dividing by the discharge flow rate. This analysis yields a dilution factor of 11.

When using the dilution factor to evaluate effluent limitations, it is common for the ME DEP to evaluate it as follows:

Nitrogen is generally the limiting nutrient for primary productivity in marine waters. Discharges of excess quantities of immediately bioavailable nitrogen can cause algal blooms in the receiving waters, which can lead to negative impacts to dissolved oxygen levels. Immediately bioavailable nitrogen typically consists of dissolved inorganic forms, including nitrate (NO3-), nitrite (NO2-), and ammonium (NH4+). Total kjeldahl nitrogen (TKN) is the sum of organic nitrogen, ammonia (NH3), and ammonium (NH4+). To calculate Total Nitrogen (TN), the concentrations of nitrate and nitrite are determined and added to TKN. With the exception of ammonia, nitrogen is not acutely toxic; thus, at this time, a far-field dilution model is considered to be most appropriate when evaluating the more systemic types of influences associated with nitrogen in the marine environment.

Currently there are no state or federally promulgated best practicable treatment standards for closed-pen aquaculture facilities and the State of Maine has not promulgated numeric ambient water quality criteria for TN. Since 2015, on a case-by-case basis, ME DEP staff have completed reasonable potential (RP) analyses upon renewal of wastewater discharge licenses for those facilities that discharge nitrogen directly to marine waters of the state. To date, the ME DEP RP analyses have generally utilized two TN threshold values to address aquatic life use of Maine's marine waters:

1. 0.32 mg/L for protection of eelgrass, when historically mapped as present within close proximity to the discharge in question; and

2. 0.45 mg/L for protection of dissolved oxygen, when eelgrass has not been historically mapped within close proximity to the discharge in question.

No eelgrass is mapped within close proximity of the proposed discharge.

Analysis of Dissolved Oxygen as the Environmental Response Indicator

Given:

Critical water quality threshold - 0.45 mg/L

Background concentration (from average FB concentration measured by applicant) – 0.215 mg/l

American Aquafarms proposed average primary discharge concentration of total nitrogen is 0.116 mg/L above background.

American Aquafarms proposed primary discharge daily total nitrogen mass:

(0.116 mg/L)(90 m^3/s)(1000 L/m^3)(86400 s/day)(1/1000000 kg/mg) = 902 kg/day

(902 kg)(2.2 lb/kg) = 1984 lb/day

Far field factor: 11:1

Proposed effluent limitation:

0.45 mg/L – 0.215 mg/L = 0.235 mg/l (remaining assimilative capacity)

(0.235 mg/L) (0.2) = 0.047 mg/L (20% of the remaining assimilative capacity)

(11)(0.047 mg/L) = .5170 mg/L (limit on primary discharge concentration above background)

Daily primary discharge total nitrogen mass limitation:

(0.5170 mg/L)(90 m^3/s)(1000 L/m^3)(86400 s/day)(1/1000000 kg/mg) = 4020 kg/day

(4020 kg)(2.2 lb/kg) = 8844 lb/day

Secondary Discharge

Near-Field Dilution

As proposed, effluent from the FB02 waste barge will meet acute toxicity criteria for any toxic pollutants at the discharge port such that additional dilution within the NFR is not necessary to meet toxicity criteria. A summary of the near-field solution factors in provided in Table 10.

Table 10. Recommended near-field dilution factors for FB02 secondary discharge.

Tidal Current	**Dilution Factor**	**Toxicity**
MLW slack	147	Acute
Mid-tide	221	Chronic

Far-field dilution

To aid in evaluation of waterbody anti-degradation criteria for the FB02 secondary discharge we have estimated far-field dilution by calculating the tidal residual volume flux of water passing through the lease site and dividing by the discharge flow rate. This analysis yields a dilution factor of 200,000.

Given:

Critical water quality threshold - 0.45 mg/L

Background concentration (from average FB concentration measured by applicant) – 0.215 mg/l

American Aquafarms proposed average secondary discharge concentration of total nitrogen is 239.5 mg/L above background.

American Aquafarms proposed secondary discharge daily total nitrogen mass:

(239.5 mg/L)(0.0078 m^3/s)(1000 L/m^3)(86400 s/day)(1/1000000 kg/mg) = 161 kg/day

(161 kg)(2.2 lb/kg) = 354 lb/day

Far field factor: 126,900:1

Proposed effluent limitation after primary discharge:

0.45 mg/L – 0.215 mg/L – (1/11)(0.116 mg/L) = 0.2245 mg/l (remaining assimilative capacity)

(0.2245 mg/L) (0.2) = 0.0449 mg/L (20% of the remaining assimilative capacity)

(126,900)(0.0449 mg/L) = 5698 mg/L (limit on secondary discharge concentration above bg)

Daily secondary discharge total nitrogen mass limitation:

(5698 mg/L)(0.0078m^3/s)(1000 L/m^3)(86400 s/day)(1/1000000 kg/mg) kg/day= 3840 kg/day

(3840 kg)(2.2 lb/kg) = 8448 lb/day

ATTACHMENT 6
NOTICES

This attachment provides the following information:

- Public Notices published in The Ellsworth American on March 25, 2021; April 22, 2021; and April 29, 2021
- List of Attendees from the May 6, 2021 Public Information Meeting
- Summary of Questions and Responses from the May 6, 2021 Public Information Meeting

PUBLIC NOTICES

NOTICE OF INTENT TO FILE MAINE WASTE DISCHARGE PERMIT APPLICATION

Please take note that, pursuant to 38 MRSA, Sections 413 and 414-A, American Aquafarms, of 68 Commercial Street, Portland, ME 04101, intends to file a wastewater discharge permit application with the Department of Environmental Protection (DEP). The application is for the discharge of 90 m3 per sec of circulated bay water through a closed pen aquaculture facility located north of Bald Rock, taken from and returned back into Frenchman Bay in Gouldsboro, Maine.

The application will be filed on or about April 15, 2021 and will be available for public inspection at DEP's Augusta office during normal business hours. A copy may also be seen at the municipal offices in Gouldsboro.

A request for a public hearing or request that the Board of Environmental Protection assume jurisdiction over this application must be received by the DEP, in writing, no later than 20 days after the application is found acceptable for processing, or 30 days from the date of this notice, whichever is longer. Requests shall state the nature of the issue(s) to be raised. Unless otherwise provided by law, a hearing is discretionary and may be held if the Commissioner or the Board finds significant public interest or there is conflicting technical information.

During the time specified above, persons wishing to receive copies of draft permits and supporting documents, when available, may request them from DEP. Persons receiving a draft permit shall have 30 days in which to submit comments or to request a public hearing on the draft.

Public comment will be accepted until a final administrative action is taken to approve, approve with conditions or deny this application. Written public comments or requests for information may be made to the Division of Water Resource Regulation, Department of Environmental Protection, State House Station #17, Augusta, Maine 04333. Telephone (207) 287-3901.

NOTICE OF INTENT TO FILE MAINE WASTE DISCHARGE PERMIT APPLICATION

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The application will be filed on or about April 15, 2021 and will be available for public inspection at DEP's Augusta office during normal business hours. A copy may also be seen at the municipal offices in Gouldsboro.

A request for a public hearing or request that the Board of Environmental Protection assume jurisdiction over this application must be received by the DEP, in writing, no later than 20 days after the application is found acceptablefor processing, or 30 days from the date of this notice, whichever is longer. Requests shall state the nature of the issue(s) to be raised. Unless otherwise provided by law, a hearing is discretionary and may be held if the Commissioner or the Board finds significant public interest or there is conflicting technical information.

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LAMOINE PLANNING BOARD NOTICE OF PUBLIC HEARING

Having found the applications complete, the Lamoine Planning Board will hold Public Hearings on the following Gravel Permit application on Monday, April 5, 2021 beginning at 6:30 PM p.m. at the Lamoine Town Hall, 606 Douglas Hwy., Lamoine, ME.

PCJ LLC "King Pit" – Map 7 Lot 3-2

Harold MacQuinn, Inc. "Kittredge Pit" Map 3 Lots 31 & 33

Due to attendance limitations, the hearings will also be held via zoom meetings. Interested parties may request an electronic invitation from the town. Written testimony may be submitted to the town office at the above address, or via e-mail: town@lamoine-me.gov.

Copies of the applications are on file at the town office for viewing during regular business hours.

Ordered by:

John Holt, Chair, Lamoine Planning Board

CITY OF ELLSWORTH PLANNING BOARD WEDNESDAY, APRIL 7, 2021, 5:30 PM ZOOM MEETING REVISED AGENDA

In accordance with *An Act To Implement Provisions Necessary to the Health, Welfare and Safety of the Citizens of Maine in Response to the COVID-19 Public Health Emergency*, as enacted to read: Sec G-1 1 MRSA §403-A Public proceedings through remote access during declaration of State of Emergency due to COVID-19, the **April 7, 2021 Planning Board meeting** will be held through a **ZOOM Meeting** to begin at **5:30 PM.**

A link for the public to access the ZOOM webinar will be posted to ellsworthmaine.gov and the City of Ellsworth Facebook page the morning of April 7, 2021. Instructions for how to participate in the public hearing portions of the meeting are also posted on ellsworthmaine.gov. The meeting will also be broadcast live on the City of Ellsworth Facebook page and YouTube Channel. The meeting will be recorded and made available live on Spectrum Channel 1303.

Public comment or questions prior to the meeting are strongly encouraged. You may email written public comments/questions prior to the meeting to ktaylor@ellsworthmaine.gov, or mail them to the Planning Office, 1 City Hall Plaza, Ellsworth, ME 04605. Please call 669-6615 if you have questions on a specific application, or on how to participate prior to or during the meeting.

The Planning Board will conduct the following business, hear public comment, and consider the following:

1. Roll Call of members present

2. Call to Order

3.Adoption of Minutes from the March 3, 2021 meeting.

4. Sketch Plan Review for a Major Use Site Development entitled Ellsworth Renewables for Nexamp Solar, LLC. The proposal is to construct a 25-acre solar energy facility on a 94.6-acre parcel (Tax Map 37 Lots 20 & 20-1) owned by Adelbert Gaspar located on the Bucksport Road in the Rural and Drinking Water Zones.

a.) PUBLIC HEARING AND GENERAL DISCUSSION

5. Preliminary Plan Review for a Major Use Site Development entitled Grindle Pit for E. Skip Grindle & Sons Inc. The proposal is to create a 10-acre gravel pit and access road on a 45-acre parcel (Tax Map 60 Lot 8) located on North Street. All of the subject property is located in the Rural and Limited Residential Zones.

a.) PUBLIC HEARING AND DETERMINATION OF APPLICATION COMPLETENESS

6. Preliminary/Pre-Application Plan Review for an interior Subdivision to an existing building entitled Carriglea, LLC for Dr. Penelope Houghton. The proposal is to subdivide the existing building located on a 16,117 SF lot located at 71 Oak Street (Tax Map 136 Lot 124) into four professional office spaces in the Downtown Zone.

a.) PUBLIC HEARING AND DETERMINATION OF APPLICATION COMPLETENESS

7. Adjournment.

BLASTING NOTICE

Harold MacQuinn, Inc. will be blasting in our Hancock Quarry on the Henderson Road for the month of March 2021. Monday through Friday between the hours of 9 a.m. and 4 p.m.

Access: the "Henderson Road" is gated at Route 1 and before and after the "MacQuinn Quarry".

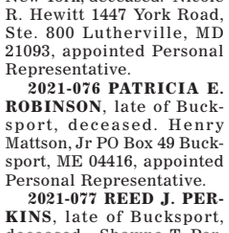
Warning: Three whistles – blasting in five minutes.

Two Whistles – blasting in one minute.

One Whistle – blasting complete – all clear.

No home(s) within one-half mile.

Any questions can be directed to the office of Harold MacQuinn, Inc. at 667-4653.



STATE OF MAINE PROBATE COURT 50 STATE STREET HANCOCK COUNTY
ELLSWORTH, ME 04605
NOTICE TO CREDITORS 18-C MRSA 3-801

The following Personal Representatives have been appointed in the estates noted. The first publication date of this Notice is **March 18, 2021**. If you are a creditor of an estate listed below, you must present your claim within four months of the first publication date of this Notice to Creditors or be forever barred.

You may present your claim by filing a written statement of your claim on a proper form with the Register of Probate of this Court by delivering or mailing to the Personal Representative listed below at the address published by his name, a written statement of the claim indicating the basis therefore, the name and address of the claimant and the amount claimed, or in such other manner as the law may provide. See 18-C MRSA 3-804.

2021-033 WILLIAM SCHILLER, late of Bronx, New York, deceased. Nicole R. Hewitt 1447 York Road, Ste. 800 Lutherville, MD 21093, appointed Personal Representative.

2021-076 PATRICIA E. ROBINSON, late of Bucksport, deceased. Henry Mattson, Jr PO Box 49 Bucksport, ME 04416, appointed Personal Representative.

2021-077 REED J. PERKINS, late of Bucksport, deceased. Shawne T. Perkins P. O Box 117 Greenfield Ctr. NY 12833, appointed Personal Representative.

2021-078 JOHN M. AMBIELLI, late of Bar Harbor, deceased. Barbara L. Ambielli 37 Ladyslipper Lane, Bar Harbor, ME 04609, appointed Personal Representative.

2021-080 JOSEPH HILLIS MILLER, late of Sedgwick, deceased. Robin Leigh Miller 28 Sperry Rd, Bethany, CT 06524 and Sarah Elizabeth Miller 26 Norval St, Toronto, Ontario, Canada M6N 3Z2, appointed Co-Personal Representatives.

2021-081 MILDRED A. DAVIS, late of Ellsworth, deceased. Ansusan D. Brewer 1742 James Avenue State College, PA 16801, appointed Personal Representative.

2021-084 C. JEAN CONARY, late of Orland, deceased. Graydon Lord 12317 Cliveden St Herndon, VA 20170, appointed Personal Representative.

2021-085 ANAMAE BROWN, late of Deer Isle, deceased. Susan Kimball 118 Country Club Road Hollis, ME 04042, appointed Personal Representative.

2021-086 DAVID LAWRENCE HARKINS, late of Mount Desert, deceased. Tina Marie Brown 330 Carl Cedar Hill Rd Winder, GA 30680, appointed Personal Representative.

2021-087 NATHANIEL C. BRADLEY, late of Gouldsboro, deceased. Jane B. Bradley 48 Wolf Pen Lane Gouldsboro, ME 04607, appointed Personal Representative.

2021-088 PATRICIA A. MURPHY, late of Surry, deceased. Ralph M. Murphy, III PO Box 745, Hampden, ME 04444, appointed Personal Representative.

2021-089 TYLER POOLE, late of Bucksport, deceased. Dorothy Poole 28 Mill Street Apt. 2 Brewer, ME 04412, appointed Personal Representative.

2021-094 JAMES EDWARD HASKELL, late of Franklin, deceased. Michelle Springer PO Box 18 Franklin, ME 04634, appointed Personal Representative.

2021-095 AGNES B. GALLAGHER, late of Blue Hill, deceased. William S. Webb P.O Box 1425 Blue Hill, ME 04614, appointed Personal Representative.

2021-096 EDWIN FRANCIS KING, late of Mariaville, deceased. Rhonda Lynn Whalen 1736 Mariaville Rd, Mariaville, ME 04605, appointed Personal Representative.

2021-097 GLADYS A. STAPLES, late of Holden, deceased. Angela Staples 97 Pinkham Brook Road Durham, ME 04222, appointed Personal Representative.

2021-099 MICHAEL S. WILLIAMS, late of Franklin, deceased. Brandon N. Williams 118 Oldbury Drive Wilmington, DE 19808, appointed Personal Representative.

2021-101 TODD RUSSELL HOGLUND, late of Franklin, deceased. Carol Jean Perreault 8 Megan's Way Trenton, ME 04605, appointed Personal Representative.

2021-103 ROBERT W. PATTERSON JR., late of Mount Desert, deceased. William Nicholas Burnett P.O Box 389 Mount Desert, ME 04660 and Diane S. O'Connell 77 State Street Ellsworth, ME 04605, appointed Personal Representatives.

Date: _____
Register of Probate

Town of Trenton

PUBLIC NOTICE
TRENTON PLANNING BOARD
SPECIAL MEETING
April 7, 2021 @ 7:00 p.m.
Trenton Town Office

The Trenton Planning Board will hold a special meeting on April 7th to complete the finding of facts for the Wild Acadia Campground and Adventure Park application which was approved by the Planning Board at their last meeting.

ELLSWORTH

PUBLIC NOTICE

CITY OF ELLSWORTH WORKSHOP
MARCH 29, 2021 • 6:00 PM
CITY HALL COUNCIL CHAMBERS

The discussion will be held live at 1 City Hall Plaza in the City Hall Council Chambers with only the allowable number of participants according to the Governor's executive orders. Citizens may email questions and public comments to dhamilton@ellsworthmaine.gov prior to and throughout the duration of the evening. The discussion will be broadcast live on the City of Ellsworth, Maine Facebook page and YouTube Page; as well as recorded and made available live on Spectrum Channel 1303.

Facebook: https://www.facebook.com/ellsworthme
YouTube: https://www.youtube.com/c/CityofEllsworthMaine

ELLSWORTH GREEN PLAN PRESENTATION WORKSHOP

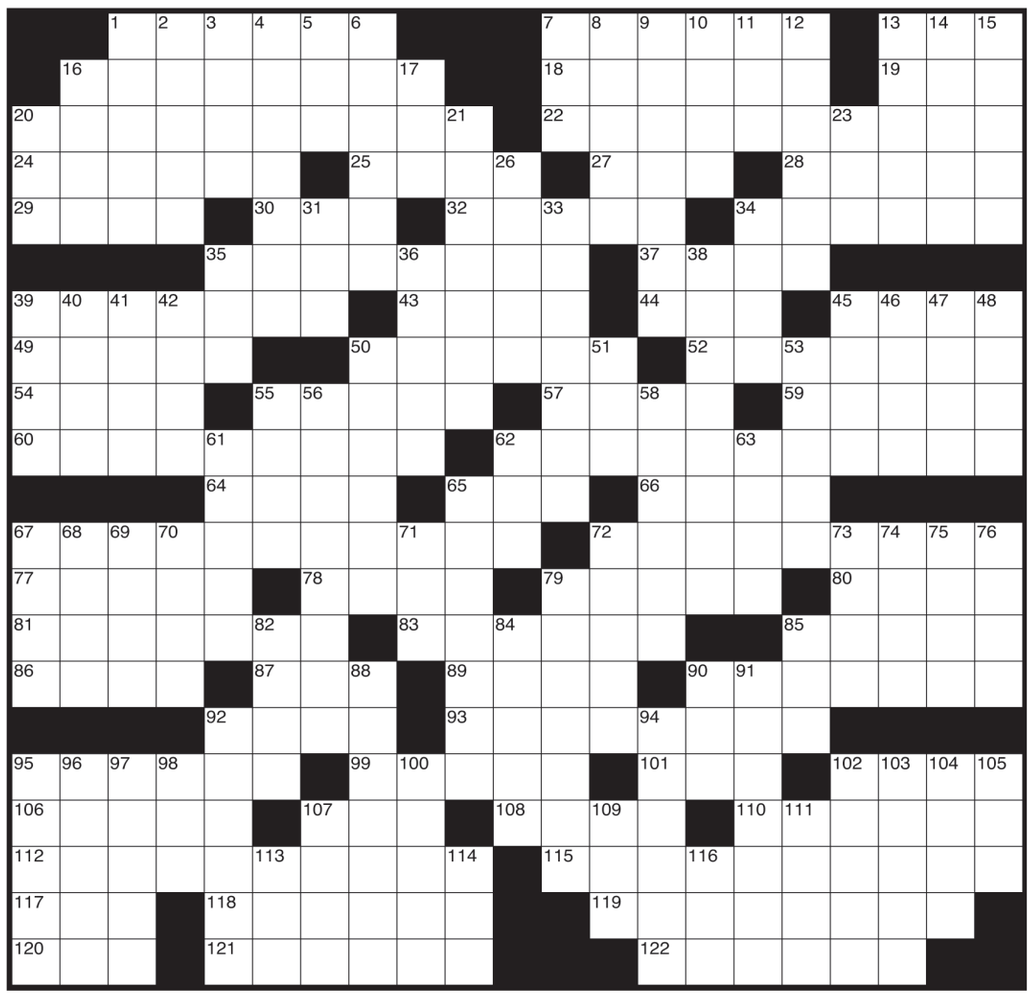
Members of the Ellsworth Green Planning Committee and Ellsworth City Council will discuss the Green Plan.

Members of the public are welcome to attend this meeting; however, seating will be limited. Please RSVP to Heidi-Noël Grindle at hgrindle@ellsworthmaine.gov to reserve a seat.

A quorum of City Councilors may be present for discussion purposes; no formal action will take place during this gathering.

The American Crossword Puzzle

Silly U. By Merl Reagle



ACROSS

1 Dill pickle slices
7 Beat ___ (get off)
13 Rifle ammo
16 Miner's alma mater?
18 Language of eastern Africa
19 Active, as pinball bumpers
20 School that turns out all the bad eggs of society?
22 School founded by Fred Fotomat?
24 Emulate Edison
25 Part of the hand
27 Friday, e.g.
28 Islands E of Fiji
29 Swerve
30 Cop alert, briefly
32 Farmer's alma mater?
34 School surrounded by rivers?
35 Hero's order that a tagalong never obeys
37 Green land
39 Comedian's alma mater?
43 The Sandusky River flows into it
44 Lawn job need
45 Wet, relaxing places
49 (None of the above)
50 Supplies the grub for
52 Rancher's alma mater?
54 Part of a dieter's "planner"
55 Poles et al.
57 Prov. north of North Dakota
59 Missile type, ___-surface
60 School for big babies?
62 School that Gump attends—and sleeps through?
64 They put the "broad" in Broadway
65 Like some cats
66 Less than prompt
67 School specializing in German truck design?
72 School that Lois Lane attends?
77 ___ with a view
78 Church section
79 Kid's assertive response
80 Not new
81 School for screenwriters?
83 African desert
85 Hold on (to), as Mommy
86 Country singer Hall
87 Had a 54 Across
89 Nick's sleuthing spouse
90 Traffic school?
92 Low card
93 Wagon amount
95 Gangster's alma mater?
99 School with abrasive teachers?
101 Word with shoo or shut
102 Political "coat holder"
106 Follow
107 MIT's forte
108 Brand of Puerto Rican rum
110 Pirate punishment
112 Usher's alma mater?
115 New York school noted for its cranium studies?
117 Fall (behind)
118 Brought up
119 Alma mater of Hollywood tour-bus drivers?
120 Dorking drink
121 Actress Suzanne
122 Slow down

DOWN

1 Do this puzzle, e.g.
2 Less healthy-looking
3 Joie de vivre
4 Cause trouble
5 Took off
6 Visit
7 Kitchen meas.
8 Rational creature in "Gulliver's Travels"
9 Homeland fleers
10 Go on a tirade
11 Option: abbr.
12 Detroit player
13 Hair color
14 Eating jag
15 Kitchen mist
16 Film opening?
17 Richard Wagner daughter
20 The Lucy Show character
21 Brooks and Finney
23 Golden, to Godard
26 Louis XVI's queen
31 Golf goal
33 Ogles and then some
34 Dog's name
35 Term of respect
36 Throw with effort
38 Some concertgoers
39 Birth berth?
40 Virginia willow genus
41 Melt
42 Storied archer
45 Ruckus
46 Father, to Chirac
47 Deeds
48 Totally frazzled, as nerves
50 Wiener topper
51 Bag, in product names
53 Merchandise
55 Dressing-room door symbol
56 Denounce strongly
58 Ill-fated Latin singing star
61 Curly's replacement
62 Cambodia's Angkor ___
63 Palindromic name
65 Banquo's son, in Macbeth
67 Humongous
68 U.S. oil company
69 Standard amount
70 "Just ___"
71 Edition: abbr.
72 Gold unit
73 Boring
74 Indians' home
75 Graceland's home: abbr.
76 Rough aspect
79 Misbehave
82 Does roadwork
84 Be miserly
85 Boston fish
88 Vision maintenance
90 Great weight
91 "For want of a nail, a shoe ___"
92 Possessive pronoun
94 Package store offering
95 Coil guy
96 Bad News Bears actress
97 Subject for Safire
98 ___ reaction
100 Track specialist
102 Potok's Lev
103 "___ the sword, and he did run on it" (Shak.)
104 Oscar ___ Renta
105 Lang. class for new arrivals
107 Big put-on
109 Napoleon's field marshal (or backwards, longing)
111 On the briny
113 Modern prefix
114 Mormon inits.
116 Regret

Every puzzle has just one correct solution. See Section 3 Page 7
Subscribers to the digital edition can download a printable version of this puzzle.

JUMBLE THAT SCRAMBLED WORD GAME By David L. Hoyt and Jeff Knurek

Unscramble these Jumbles, one letter to each square, to form six ordinary words.

TETDCE
CFILEK
LATCET
RECAOS
YFNMIA
GHUATT

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Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

PRINT YOUR ANSWER IN THE CIRCLES BELOW

Every puzzle has just one correct solution. See Section 3, Page 7

Sudoku Puzzle 1

MEDIUM

3						7		4
		5		1				
8			6		4		5	
		8	2		5	9		
	7						8	
		9	8		7	4		
	4		9		6			7
				5		3		
9		2						1

Sudoku Puzzle 2

HARD

			1		3	8		
		2	8			5		
	3			5				2
						7	8	
		3	6		7	4		
	6	9						
9				4			3	
		7			2	6		
		1	5		8			

Every puzzle has just one correct solution. See Section 3 Page 7
Subscribers to the digital edition can download a printable version of this puzzle.

PUBLIC HEARING
TOWN OF GOULDSBORO

The Town of Gouldsboro will be holding a public hearing Tuesday April 6 at 6 p.m. to consider the following:
Site Plan Review
for Mike Gerrish to open a Heavy Equipment repair garage on Walters road behind Fire Station #3.

TOWN OF HANCOCK

PAVING BID NOTICE

The Town of Hancock is now accepting bids for paving the following sections of road:
RTE 1 end of Eastside Road – Entrance of RTE 1 to Eastside Road
Then beginning at Long Pond Subdivision to just past Tidal Falls Road
Description: **Eastside Road, Hancock**
RTE 1 entrance (marked with green/orange ribbon) to line in the road from old pavement to newer pavement (marked with green/orange ribbon).
Long Pond Subdivision (marked with green/orange ribbon) to just past Tidal Falls Road newer/older pavement lines in the road (marked with green/orange ribbon)
Bids **must** be received by close of business day **April 29, 2021** at the Hancock Town Office.
Accepted bids will be awarded at the select board meeting on May 5, 2021. Paving must be completed and billed to Town of Hancock no later than June 25, 2021.

PUBLIC NOTICES

NOTICE OF INTENT TO FILE

Please take notice that Town of Sorrento, ME 79 Pomola Ave, Sorrento, ME 04677 is intending to file a Natural Resources Protection Act permit application with the Maine Department of Environmental Protection pursuant to the provisions of 38 M.R.S.A. §§ 480-A thru 480-BB on or about 4/1/21 .

The application is for: Town Municipal Dock at the following location: Ocean Ave, Town Landing Ramp.

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection.

Public comment on the application will be accepted throughout the processing of the application.

For Federally licenses, permitted, or funded activities in the Coastal Zone, review of this application shall also constitute the State's consistency review in accordance with the Maine Coastal Program pursuant to Section 307 of the federal Coastal Zone Management Act, 16 U.S.C. § 1456.

The application will be filed for public inspection at the Department of Environmental Protection's office in Bangor during the normal hours. A copy of the application may also be seen at the municipal offices in Sorrento, ME .

Written public comments may be sent to the regional office in Bangor where the application is filed for public inspection

MDEP, Eastern Maine Regional Office, 106 Hogan Road, Bangor, Maine 04401

TOWN OF HANCOCK

HEAVY LOAD LIMIT

The following public ways in Hancock are closed to heavy loads except when solidly frozen:

THORSEN ROAD from **MERRILL BLUEBERRY FARMS** to the **WASHINGTON JUNCTION ROAD**

EAST SIDE ROAD, POINT ROAD, OLD ROUTE ONE, AUSTIN ROAD, COFFIN ROAD, TANNERY ROAD AND PEASLEE ROAD

LOAD LIMIT: 23,000 POUNDS GROSS VEHICLE WEIGHT

Closing Date: April 1, 2021/Hancock Selectboard

PUBLIC NOTICE: NOTICE OF INTENT TO FILE

Please take notice that Steven and Brenda Shelton, 1415 Bayside Road, Trenton, Maine (agent phone number (207) 837 – 2199) are intending to file a Natural Resources Protection Act permit application with the Maine Department of Environmental Protection pursuant to the provisions of 38 M.R.S.A §§ 480-A thru 480-BB on or about March 23, 2021. The application is for the construction of a dock consisting of two pier sections, a ramp, and float located at 1415 Bayside Road (Map 13, Lot 20) in the Town of Trenton, ME. A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the application. The application will be filed for public inspection at the Department of Environmental Protection's office in Bangor during normal working hours and an electronic copy is available by contacting the DEP office listed. A copy of the application may also be seen at the municipal offices in Trenton, Maine. Written public comments may be sent to the regional office in Bangor where the application is filed for public inspection: MDEP, Eastern Maine Regional Office, 106 Hogan Road, Bangor Maine 04401.

PUBLIC NOTICES

NOTICE OF INTENT TO FILE MAINE WASTE DISCHARGE PERMIT APPLICATION AND NOTICE OF PUBLIC INFORMATIONAL MEETING ON APRIL 28, 2021

Please take note that, pursuant to 38 MRSA, Sections 413 and 414-A, American Aquafarms, of 68 Commercial Street, Portland, ME 04101, intends to file a wastewater discharge permit application with the Department of Environmental Protection (DEP). The application is for the discharge of 90 m3 per sec of circulated bay water through a closed pen aquaculture facility located north of Bald Rock, taken from and returned back into Frenchman Bay in Gouldsboro, Maine.

The application will be filed on or about May 3, 2021 and will be available for public inspection at DEP's Augusta office during normal business hours. A copy may also be seen at the municipal offices in Gouldsboro.

A request for a public hearing or request that the Board of Environmental Protection assume jurisdiction over this application must be received by the DEP, in writing, no later than 20 days after the application is found acceptablefor processing, or 30 days from the date of this notice, whichever is longer. Requests shall state the nature of the issue(s) to be raised. Unless otherwise provided by law, a hearing is discretionary and may be held if the Commissioner or the Board finds significant public interest or there is conflicting technical information.

During the time specified above, persons wishing to receive copies of draft permits and supporting documents, when available, may request them from DEP. Persons receiving a draft permit shall have 30 days in which to submit comments or to request a public hearing on the draft.

Public comment will be accepted until a final administrative action is taken to approve, approve with conditions or deny this application. Written public comments or requests for information may be made to the Division of Water Resource Regulation, Department of Environmental Protection, State House Station #17, Augusta, Maine 04333. Telephone (207) 287-3901.

The applicant will hold a public informational meeting to inform the public about the project and its anticipated environmental impacts and to educate the public about the opportunities for public comment on the project. Due to the COVID-19 pandemic and restrictions on in-person gatherings, **the public meeting will be held via Zoom Webinar and by telephone on Wednesday, April 28, 2021, starting at 6:00 p.m.** Questions from the public will be taken both online and by phone. Please direct any questions or comments to Tom Brennan at thomas.j.brennan@americanaquafarms.com or (207)405-7451.

Please use the link below to join the webinar:

https://bernsteinshur.zoom.us/j/98062645039?pwd=dWV1eE8rYTloanlPUW8zSi9PNFRCZz09

Webinar ID: 980 6264 5039

Passcode: 071667

Or Telephone: (for higher quality, dial a number based on your current location):

US: +1 646 558 8656 or +1 301 715 8592 or +1 312 626 6799 or +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799

CITY OF ELLSWORTH PLANNING BOARD WEDNESDAY, MAY 5, 2021, 5:30 PM ZOOM MEETING AGENDA

In accordance with An Act To Implement Provisions Necessary to the Health, Welfare and Safety of the Citizens of Maine in Response to the COVID-19 Public Health Emergency, as enacted to read: Sec G-1 1 MRSA §403-A Public proceedings through remote access during declaration of State of Emergency due to COVID-19, the **May 5, 2021 Planning Board meeting** will be held through a **ZOOM Meeting** to begin at **5:30 PM.**

A link for the public to access the ZOOM webinar will be posted to ellsworthmaine.gov and the City of Ellsworth Facebook page the morning of May 5, 2021. Instructions for how to participate in the public hearing portions of the meeting are also posted on ellsworthmaine.gov. The meeting will also be broadcast live on the City of Ellsworth Facebook page and YouTube Channel. The meeting will be recorded and made available live on Spectrum Channel 1303.

Public comment or questions prior to the meeting are strongly encouraged. You may email written public comments/questions prior to the meeting to ktaylor@ellsworthmaine.gov, or mail them to the Planning Office, 1 City Hall Plaza, Ellsworth, ME 04605. Please call 669-6615 if you have questions on a specific application, or on how to participate prior to or during the meeting.

The Planning Board will conduct the following business, hear public comment, and consider the following:

1. Roll Call of members present

2. Call to Order

3. Adoption of Minutes from the April 7, 2021 meeting.

4. Final Plan Review for Subdivision of an Existing Structure entitled Carriglea, LLCfor Dr. Penelope Houghton. The proposal is to subdivide the existing building located on a 16,117 SF lot located at 71 Oak Street (Tax Map 136 Lot 124) into four professional office spaces in the Downtown Zone.

-PUBLIC HEARING, DELIBERATION, FINDINGS OF FACT, AND CONCLUSION

5. Final Plan Review for a Major Use Site Development entitled Grindle Pit for E. Skip Grindle & Sons Inc. The proposal is to create a 10-acre gravel pit and access road on a 45-acre parcel (Tax Map 60 Lot 8) located on North Street. All of the subject property is located in the Rural and Limited Residential Zones.

-PUBLIC HEARING, DELIBERATION, FINDINGS OF FACT, AND CONCLUSION

6. Preliminary Plan Review for a Major Use Site Development and Subdivision of New and Existing Structures entitled Maine SS1, LLC dba 1 Stop Self Storage for Maine SS1, LLC. The proposal is to renovate and expand an existing self-storage facility on a 3.5-acre parcel (Tax Map 31 Lot 10-1) located at 36 Hagans Elbow. All of the subject property is located in the Rural Zone.

-PUBLIC HEARING AND DETERMINATION OF APPLICATION COMPLETENESS

7. Staff Comments

8.Adjournment

PUBLIC NOTICE

The Franklin Planning Board will hold a Public Hearing on an application for an eleven lot subdivision, to be named Clark Estates, on Goodwin Road, Lot 34, Tax Map 5. The application is presented by SFS Development LLC, represented by Stephen Salsbury of Herrick & Salsbury Inc.

Date of Public Hearing: **Thursday, April 29th, 2021**

Time of hearing: **6:30 PM**

Place of hearing: **Franklin Community Center**

Please Note:to reduce potential exposures to COVID 19, the meeting will be held in the Community Center meeting room. Face coverings will be required, as well as social distancing, and handwashing facilities are immediately adjacent. Attendance will be limited to 50 persons per state executive orders with entrance at the rear doors only. The meeting will be available on Zoom.com at:

Meeting ID: 879 8619 9397 Passcode: 998766

The Planning Board will hold a regular meeting immediately following the Public Hearing and will hear and may act upon this application at that time. The application materials are available for examination at the Franklin Town Office during regular hours. Questions and comments may be sent to Brian Abbott, Franklin Planning Board, P.O. Box 206, Franklin, ME 04634.

MAINE COASTAL ISLANDS NATIONAL WILDLIFE REFUGE COMPLEX RELEASES DRAFT HUNTING PLAN FOR PUBLIC REVIEW

Hunting is a traditional uses of the National Wildlife Refuge System. At the Maine Coastal Islands National Wildlife Refuge (NWR) Complex, we welcome people of all backgrounds and abilities to participate in recreational hunting.

Maine Coastal Islands NWR Complex is seeking public review and comment on its proposed hunt plan. The public is invited to review the draft documents for our proposed hunts including the Draft Hunting Plan, Compatibility Determination and Environmental Assessment. These documents will be available for comment until, June 11, 2021.

Maine Coastal Islands NWR Complex is proposing to offer new hunting opportunities:

-Open big game (except turkey and moose), small game, and upland and migratory game bird on the new addition of the Sawyer's Marsh unit, totaling 122 acres.

-Open big game (except turkey and moose), small game, and upland and migratory game bird hunting on Bois Bubert and Little Bubert islands totaling 1,302 acres.

-Open waterfowl hunting to 20 new refuge islands totaling 160 acres.

Draft documents are available online beginning April 11, 2021 at the refuge's official website at https://www.fws.gov/refuge/maine_coastal_island You can also contact the refuge at 207-594-0600 to request more information. Submit your comments by e-mail to: HuntFishRuleComments@fws.gov Please add under the subject line to your comments Maine Coastal Islands National Wildlife Refuge.

Across the country, National Wildlife Refuges work closely with state agencies, tribes, and private partners to expand recreational hunting and fishing access. Hunting provide opportunities for communities, families, and individuals to enjoy the outdoors, support conservation efforts, and participate in a popular American tradition.

PUBLIC NOTICE

TOWN OF GOULDSBORO

The Gouldsboro Planning Board Will be holding a public hearing Tuesday May 4th at the woman's club to consider a Site Plan Application submitted by Kimberlea Jo Bridges to open a hair salon located at 646 Corea Road. You may address questions or concerns in person, by zoom (address will be on town web site day of the hearing) or by mail addressed to Planning Board Chairman Town of Gouldsboro PO Box 68 Prospect Harbor, Me 04669

Town of **Winter Harbor**

PUBLIC HEARING

Notice is hereby given that the Selectmen of the Town of Winter Harbor will hold a Public Hearing at the Winter Harbor Town Office at 6:00 pm, Monday, April 26, 2021. The purpose is for consideration of the following application for on-premise liquor license:

Class X: Spirituous, Vinous and Malt-Lounge

Troy Lorenz dba The Gallery
361 Main Street, Winter Harbor, ME 04693

Cathy J. Carruthers
Town Clerk

PUBLIC HEARING

TOWN OF GOULDSBORO

Notice is hereby given that a public hearing will be held Thursday, April 29, 2021 at 6:00 pm at the Gouldsboro Town Office in Prospect Harbor to consider a renewal liquor license (malt, spirituous, vinous), a renewal tavern-keeper license certificate, and a renewal special amusement permit for:

The Pickled Wrinkle
Jesse & Sarah Christensen
9 East Schoodic Drive
Birch Harbor, ME 04613

Public comment will be heard at that time. Prior to the hearing date, written comment may be sent to the Gouldsboro Town Office, PO Box 68, Prospect Harbor, ME 04669

Real Estate

For the best local view try Homeseller at ellsworthamerican.com

Real Estate Transfers

AMHERST

■ Loiuse Joy, Ellsworth to Kassie Warren, Ellsworth, land with buildings and improvements.

BAR HARBOR

■ Danielle M. Hostins, Hulls Cove to Andrew J. Geels, Bar Harbor, land with improvements.

BLUE HILL

■ Estate of Agnes B. Gallagher to William S. Webb and Doris G. Webb, Blue Hill, as joint tenants, land with buildings.

BROOKLIN

■ William S. Hanley and Nancy J. Hanley, Brooklin to William S. Hanley and Nancy J. Hanley, Brooklin as joint tenants, land with buildings and improvements.

■ Roxanne A. Sherman and Michelle E. Sherman, Brooklin to Jenny C. Lewandowski and John V. Lewandowski, Brooklin, as joint tenants, land with improvements.

BROOKSVILLE

■ Harbor Woods LLC, Brooksville to Laura H. Hill, Burlington, Vt., land.

BUCKSPORT

■ Terry L. Gossell and Jeffery R. Gossell, Bucksport to Heather Nicole Rawcliffe and Robert Charles Rawcliffe, Hampden as joint tenants, land.

■ Vicki Haskell, Newburgh and Suzanne Williams, Bucksport to Ryan McGuire, Bucksport and Crystal McGuire, Bucksport, as joint tenants, land.

■ Jason Grindle and Michelle Grindle, Bucksport to Brent Chaffee and Kaylee Chaffee, Bucksport, as joint tenants, land with buildings and improvements.

■ Daniel E. Bennett, Bucksport to Milton Herbest and Lynn Herbest, Bucksport, as joint tenants, land with buildings and improvements.

■ Jodie Lynn Aragona, Southwest Harbor to Kim Steckley and Mark Fordham, Clifton, N.J., as joint tenants, land with buildings.

■ Nicole Grayling, Bucksport to Melissa Terino Gray, Carmel, land with buildings and improvements.

■ The Inhabitants of the Town of Bucksport to Malinda L. Danico, Sedgwick, land.

■ The Inhabitants of the Town of Bucksport to Malinda L. Danico, Sedgwick, land.

■ The Inhabitants of the Town of Bucksport to Marion R. Grunwald, Bucksport, land.

CASTINE

■ Matthew J. Pilotte and Kate M. Pilotte, Manchester, N.H., to Matthew J. Pilotte and Kate M. Pilotte, Manchester, N.H., land with improvements.

■ Matthew J. Pilotte and Kate M. Pilotte, Manchester, N.H., to Matthew J. Pilotte and Kate M. Pilotte, Manchester, N.H., land with improvements.

DEDHAM

■ Kristy Coleen Hardison, Franklin to Joseph Robert Hardison Sr., Dedham, land.

■ Jonathan M. Schiffer, Dedham to Joshua Andrew Cook and Christina Delight Cook, New Windsor, Md., as joint tenants, land.

DEER ISLE

■ Pamela Boyd, Montpelier, Vt., to Pamela Boyd, Montpelier, Vt., and Wheeler Asa Boyd-Boffa, San Francisco, Calif., as joint tenants, land.

■ Lissa D'Errico, Bangor and Michael D'Errico, Bangor to John L. D'Errico, Bangor land.

■ Trustee of the Catherine L. D'Errico Family Trust to John L. D'Errico, Bangor, Lissa D'Errico, Bangor and Michael D'Errico, Bangor, land with improvements.

EASTBROOK

■ Clifford Haslam to Marica Haslam, Brewer, land with buildings and improvements.

ELLSWORTH

■ Nelson Ralph Hartley and Patricia Hartley, Trenton to Ryan Michael Hartley and Carly Jean Spear, Ellsworth, land.

■ James Donald Griffis, Aurora, N.Y., to Trustee of the James D. Griffis Living Trust, Aurora, N.Y., land with buildings.

■ Scott R. Conners, Otis, Kristin L. Scott, Otis and Amy M. Boyle to Sandra J. Conners, Ellsworth, land with buildings and improvements.

■ Broughman Builders Inc., Ellsworth to Danielle Marie Lindsay-Mercier, Ellsworth, land.

■ Stacy R. Potter, Ellsworth to Stacy R. Potter and Darlene M. Potter, Ellsworth, as joint tenants, land with buildings and improvements.

■ David L. Butterfield and M. Lisa Butterfield, Naples, to Rupert B. White III and April D. White, Holden as joint tenants, land.

■ David Unlimited Inc., Otis to ADI Enterprises LLC, Otis, land with buildings and improvements.

■ One High Chair LLC, Ellsworth to 1 High Street LLC, Palm Beach, Fla., land with improvements.

■ Estate of Bruce R. Merritt to Wanda S. Gatcomb, Hancock, Richard B. Merritt, Lisbon Falls and Patricia M. Kelly, Ellsworth, as joint tenants, land.

■ Julia Irvine Madore, Berkeley, Calif., to Opus One LLC, Ellsworth, land with buildings and improvements.

GOULDSBORO

■ Adin Reed, Gouldsboro, to Scott Rolfe and Elizabeth Rolfe, Gouldsboro, land with improvements.

■ Mary R. Fernandez, Ellsworth to Trustee of the Poneman Family Trust, Nokomis, Fla., land.

■ Robert W. Bartlett and Katie Bartlett, Gouldsboro to Deane Point LLC, Naples, Fla., land with buildings and improvements.

■ Trustees of the Roger W. Bowen and Barbara H. Bowen Trust, to Brian Eaton and Kerry Eaton, Prospect Harbor, as joint tenants, land with improvements.

HANCOCK

■ Lucas William Campbell, Corinth, Vt., to Steven D. Mosely, Franklin, land with buildings and improvements.

LAMOINE

■ Maurice Galipeau, Acushnet, Mass., to Sandy L. Collier, Hulls Cove, land.

■ Steven A. Hicks, Lamoine to Chirstopher John Dupis and Jillian L. Dupuis, Lamoine as joint tenants, land.

MARIAVILLE

■ Karen DeWitt Bowman, Ellsworth and James DeWitt and Carol DeWitt, Ellsworth to Karen DeWitt Bowman, James DeWitt and Carol DeWitt, Ellsworth as joint tenants, land with improvements.

■ Matthew DeWitt, Ellsworth to James DeWitt Jr. and Carol DeWitt, Ellsworth as joint tenants, land with improvements.

MOUNT DESERT

■ Reece A. Kain Jr. and Miriam H. Kain, Gloucester, Va., to William D. Helprin Jr., Mount Desert, land with improvements.

■ William D. Helprin Jr., Mount Desert to William D. Helprin Jr., Mount Desert, land with improvements.

■ Kevin Wignall and Eileen Wignall, Mount Desert to Margaret Wynn Fry and Christopher James Vavra, Danville, Calif., as joint tenants, land with buildings and improvements.

ORLAND

■ Sunset Cove LLC, Orland to John J. Connolly Jr. and Lorrinda J. Connolly, Bucksport, as joint tenants, land with buildings and improvements.

■ Donalyn M. Brouty, Orland to Donalyn M. Brouty and David C. Brouty, Orland, as joint tenants, land.

OSBORN

■ David C. Flannery and Jean A. Flannery, Orrington to David C. Flannery and Jean A. Flannery, Orrington as joint tenants, land with improvements.

■ Sandra M. Rogers, Medford to MTGLQ Investors L.P, Houston, Texas, land.

PENOBSCOT

■ Vivian Turner, Penobscot, to Lloyd C. Turner Jr., Penobscot, land with buildings and improvements.

SEDGWICK

■ Mariners Pub LLC, Deer Isle to Jody A. Weeks, Deer Isle, land.

SOUTHWEST HARBOR

■ Jerry W. Tapley and Beverly Tapley, Southwest Harbor to Robert H. Zinn and Shirley D. Zinn, Southwest Harbor, as joint tenants, land with improvements.

■ Berten W. Willey and Allen B. Willey, Southwest Harbor and Diane Willey-Ward, Surry to William G. Kelly and Danielle L. Piquette-Kelly, Southwest Harbor, as joint tenants, land with improvements.

■ Harbor Ridge Condominium Association, Southwest Harbor to Timothy A. Jillette and Rachel H. Letze, Savannah, Ga., unit 54 for week 20 at Harbor Ridge.

■ Trustee of the James J. Watson Family Trust, to Gary W. Hannon and Julia L. Hannon, Billerica, Mass., as joint tenants, unit 58 for week 26, at Harbor Ridge.

■ Florence S. Ervin and Spencer Ervin, Kennett Square, Pa., to Harbor Ridge Condominium Association, Southwest Harbor, unit 34 for week 47, at Harbor Ridge.

■ Estate of Ann M. Picard to Harbor Ridge Condominium Association, unit 51 for week 11 at Harbor Ridge.

■ Richard S. Anastasia and Linda L. Anastasia, Westerly, R.I., to Trustee of the Richard and Linda Anastasia Irrevocable Trust, Westerly, R.I., land.

■ Anna Demeo Escholz and Siegmar K. Escholz, Southwest Harbor to Acadia Ridge Properties LLC, Southwest Harbor, unit 18 for week 3 at Harbor Ridge.

■ Paul A. Zedwick and Jennue L. Zedwick, Dayton, Ohio, to Harbor Ridge Condominium Association, Southwest Harbor, unit 36 for week 24, at Harbor Ridge.

■ Trustees of the Southwest Harbor Map 017 Realty Trust and Trustees of the Esther C. Perkins Irrevocable Trust, Rockport, Mass., to Tara L. Westra, Manchester, land.

■ Estate of Hazel Crafts to Jeffery H. Crafts and Jonalee Roths, Bar Harbor, land with buildings and improvements.

■ Jeffery H. Crafts, Southwest Harbor to Trustees of the Crafts Irrevocable Trust, land with buildings.

■ Trustees of the Crafts Irrevocable Trust, Bar Harbor to 464 Main Street, Bass Harbor, land.

■ Co-Conservators of Jonalee C. Roth, Bar Harbor to 464 Main Street, Bass Harbor, land.

■ Estate of Hazel Crafts, to Jeffery H. Crafts, and Jonalee Roths Bar Harbor, Land with buildings and improvements.

SULLIVAN

■ Christopher M. Girouard, Cumberland to Hartley L. H. Pond and Anne F. Perry-Pond, Sebastopol, Calif., as joint tenants, land.

SURRY

■ Personal Representative of the Estate of Patricia A. Murphy to Ralph M. Murphy III, Hampden, land.

■ Ralph M. Murphy, Hampden to Christopher K. Murphy and Kaitlyn S. Murphy, Surry, as joint tenants, land.

■ Trustee for the Structured Asset Securities Corporation to Gregory James Santillo and Cynthia Carol Santillo, Surry, as joint tenants, land.

■ Lorraine F. Ruo, Mansfield, Mass., to Trustee of the Lorraine F. Ruo Revocable Trust, Surry, land.

TD22

■ Daria Norvlaan, Round Pond to Kristi Sanders and Alexandria Victoria Sanders, Pueblo, Colo., as joint tenants, land.

TREMONT

■ Judith Hodgdon, Bernard to Debra L. Thompson, Northeast Harbor, land with buildings and improvements.

■ Nancy Ames English, Bethesda, Md., to English Seal Cove LLC, Bethesda, Md., land.

■ Reginald J. LaFontaine, Kenduskeag to Beth I. Gott, Kenduskeag, land with buildings and improvements.

TRENTON

■ The Inhabitants of the Municipality of Trenton to Mark Norwood, land with buildings.

■ The Inhabitants of the Municipality of Trenton to Mark Norwood, land with buildings.

VERONA ISLAND

■ Estate of Janice Calkins Minson to Monica A. Minson a, Los Gatos, Calif., and Matthew C. Minson, New Gloucester, land with buildings.

■ Donald P. Johnson, Prospect to Dino G. Kisamitakis, Hermon, land.

WINTER HARBOR

■ Jacob H. Barto, Bucksport to Lauren M. Kimlin and Edward J. Kimlin, Falmouth, as joint tenants, land with buildings and improvements.

PUBLIC NOTICES

CITY OF ELLSWORTH PLANNING BOARD WEDNESDAY, MAY 5, 2021, 5:30 PM ZOOM MEETING AGENDA

In accordance with An Act To Implement Provisions Necessary to the Health, Welfare and Safety of the Citizens of Maine in Response to the COVID-19 Public Health Emergency, as enacted to read: Sec G-1 1 MRSA §403-A Public proceedings through remote access during declaration of State of Emergency due to COVID-19, the **May 5, 2021 Planning Board meeting** will be held through a **ZOOM Meeting** to begin at **5:30 PM.**

A link for the public to access the ZOOM webinar will be posted to ellsworthmaine.gov and the City of Ellsworth Facebook page the morning of May 5, 2021. Instructions for how to participate in the public hearing portions of the meeting are also posted on ellsworthmaine.gov. The meeting will also be broadcast live on the City of Ellsworth Facebook page and YouTube Channel. The meeting will be recorded and made available live on Spectrum Channel 1303.

Public comment or questions prior to the meeting are strongly encouraged. You may email written public comments/questions prior to the meeting to ktaylor@ellsworthmaine.gov, or mail them to the Planning Office, 1 City Hall Plaza, Ellsworth, ME 04605. Please call 669-6615 if you have questions on a specific application, or on how to participate prior to or during the meeting.

The Planning Board will conduct the following business, hear public comment, and consider the following:

1. Roll Call of members present

2. Call to Order

3. Adoption of Minutes from the April 7, 2021 meeting.

4. Final Plan Review for Subdivision of an Existing Structure entitled Carriglea, LLCfor Dr. Penelope Houghton. The proposal is to subdivide the existing building located on a 16,117 SF lot located at 71 Oak Street (Tax Map 136 Lot 124) into four professional office spaces in the Downtown Zone.

-PUBLIC HEARING, DELIBERATION, FINDINGS OF FACT, AND CONCLUSION

5. Final Plan Review for a Major Use Site Development entitled Grindle Pit for E. Skip Grindle & Sons Inc. The proposal is to create a 10-acre gravel pit and access road on a 45-acre parcel (Tax Map 60 Lot 8) located on North Street. All of the subject property is located in the Rural and Limited Residential Zones.

-PUBLIC HEARING, DELIBERATION, FINDINGS OF FACT, AND CONCLUSION

6. Preliminary Plan Review for a Major Use Site Development and Subdivision of New and Existing Structures entitled Maine SS1, LLC dba 1 Stop Self Storage for Maine SS1, LLC. The proposal is to renovate and expand an existing self-storage facility on a 3.5-acre parcel (Tax Map 31 Lot 10-1) located at 36 Hagans Elbow. All of the subject property is located in the Rural Zone.

-PUBLIC HEARING AND DETERMINATION OF APPLICATION COMPLETENESS

7. Staff Comments

8.Adjournment

STATE OF MAINE PROBATE COURT 50 STATE STREET HANCOCK COUNTY ELLSWORTH, ME PROBATE NOTICE NAME CHANGES TO ALL PERSONS INTERESTED IN THE ESTATE LISTED BELOW

Notice is hereby given by the respective petitioner, that he/she has filed a petition in the following estate. These matters will be heard at 10:00 a.m. or as soon thereafter as they may be, on **May 11, 2021**, in the Hancock County Probate Court located at 50 State Street, Ellsworth, ME 04605. The requested actions may be taken on or after the hearing date if no sufficient objection.

2021-148 CHRISTIAN ANTHONY CAVERLY, Petition for Name Change (Adult), filed by Christian Anthony Caverly. Name requested to be changed to **ANTIMONY PERIDOT KOHL** 20 School St Apt B Bar Harbor, ME 04609.

2021-150 VERONICA DANTE SCHARTON, Petition for Name Change (Adult), filed by Veronica Dante Scharton. Name requested to be changed to **VERONICA DANTE BELLA** 12 Rockwood Ave Bar Harbor, ME 04609.

2021-166 KATIE LYNNE DAMP, Petition for Name Change (Adult), filed by Katie Lynne Damp. Name requested to be changed to **KATELYNNE MAE COUSINS** 53 Mines Rd Blue Hill, ME 04614.

Date: _____
Gale S. Coughlin
Register of Probate

TOWN OF FRANKLIN

A Public Hearing has been scheduled on an application for a Special Exception Permit to develop a production rock quarry to mine and process crushed stone, rip-rap and landscaping stones on Lot 19, Tax Map 2 on South Bay Road. This application is presented by Stephen Salsbury of Herrick & Salsbury Inc., representing the applicant, TC Gravel LLC.

Date of Public Hearing: **Thursday, May 13th, 2021**

Time of hearing: **6:30 PM**

Place of hearing: **Franklin Community Center**

This application is presented in compliance with sections 4.1.4 Special Exceptions, 5.5(3) Application for Special Exception Permit and 6.8.3 Special Exception Permits in the Zoning Ordinance of the Town of Franklin, Maine.

Please Note: to reduce potential exposures to COVID 19, the meeting will be held in the Community Center meeting room. Face coverings will be required, as well as social distancing, and handwashing facilities are immediately adjacent. Attendance will be limited to 50 persons per state executive orders with entrance at the rear doors only. The meeting will be available on Zoom.com at:

Meeting ID: 875 5951 4770 Passcode: 231695

Following the Public Hearing, the Planning Board will convene a regular meeting, and **will hear and may act upon**this application at that time.

Materials related to this application are available for examination at the Franklin Town Office during regular hours of operation. Questions and comments may be sent to Brian Abbott, Franklin Planning Board, P.O. Box 206, Franklin, ME 04634.

Brian Abbott, for the Franklin Planning Board

PUBLIC NOTICE

Building Permit Application Public notice of a Natural Resource Protection Act Permit application for Settler's Landing lot 69 in Hancock, Maine is hereby given. Please direct any inquiries to Jeff Clark/Rebecca Cross 1-(207) 460-2821 jeffclark@masiello.com

CITY OF ELLSWORTH PLANNING BOARD ONE CITY HALL PLAZA ELLSWORTH, MAINE 04605
PUBLIC NOTICE AND AGENDA PLANNING BOARD MEETING MAY 5, 2021 SITE VISIT FOR GRINDLE PIT

The Ellsworth Planning Board will meet on Wednesday May 5, 2021, at 4:00 PM at Grindle Pit (located on North Street/Route 179) to conduct a site visit for the project described in the agenda. Access for the purpose of the site visit will be via the existing gravel road off of Kidspeace Way.

Site Visit Meeting Agenda

1. Grindle Pit Site Visit.

E. Skip Grindle & Sons Inc. is proposing to create a 10-acre gravel pit on a 45-acre parcel on North Street (Tax Map/Lot: 60/8), in the Rural and Limited Residential Zones.

2.Adjournment.

The purpose of the site walk is to orient the Planning Board to the physical characteristics of the site and the anticipated changes to the site resulting from the proposed development. The applicant or applicant's representative will be present at the site walk. The Planning Board Chairman will lead the site walk. The discussion between the applicant/applicant's representative and the Planning Board will focus on the physical characteristics of the site and on the location of the proposed project. Substantive comments in support or opposition of the proposed project will be reserved for the next meeting. Members of the public are welcome to attend. The Planning Board Chairman may elect to allow the public to make comments.

NOTICE OF RESCHEDULED PUBLIC INFORMATIONAL MEETING MAY 6, 2021

Please take note that, pursuant to 38 MRSA, Sections 413 and 414-A, American Aquafarms, of 68 Commercial Street, Portland, ME 04101, intends to file a wastewater discharge permit application with the Department of Environmental Protection (DEP). The application is for the discharge of 90 m3 per sec of circulated bay water through a closed pen aquaculture facility located north of Bald Rock, taken from and returned back into Frenchman Bay in Gouldsboro, Maine.

The applicant will hold a public informational meeting to inform the public about the project and its anticipated environmental impacts and to educate the public about the opportunities for public comment on the project. Due to the COVID-19 pandemic and restrictions on in-person gatherings, **the public meeting will be held via Zoom Webinar and by telephone on Thursday, May 6, 2021, starting at 6:00 p.m.** Questions from the public will be taken both online and by phone. Please direct any questions or comments to Tom Brennan at thomas.j.brennan@americanaquafarms.com or (207)405-7451.

Please click the link below to join the webinar:

https://bernsteinshur.zoom.us/j/96511217550?pwd=ZWVDN2FQZ2x-5QU8zSWVGTzFWdFMxdz09

Webinar ID: 965 1121 7550

Passcode: 671035

Or Telephone (for higher quality, dial a number based on your current location):

+1 301 715 8592 or +1 312 626 6799 or +1 646 558 8656 or +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833

PUBLIC NOTICE

Public notice of a Natural Resource Protection Act Permit application for Settler's Landing lot 70 in Hancock, Maine is hereby given. Please direct any inquiries to Jeff Clark/Jane Grover 1-(207) 460-2821 jeffclark@masiello.com

BLASTING NOTICE

Harold MacQuinn, Inc. will be blasting in our Hancock Quarry on the Henderson Road for the month of April/May 2021. Monday through Friday between the hours of 9 a.m. and 4 p.m.

Access: the "Henderson Road" is gated at Route 1 and before and after the "MacQuinn Quarry".

Warning: Three whistles – blasting in five minutes.

Two Whistles – blasting in one minute.

One Whistle – blasting complete – all clear.

No home(s) within one-half mile.

Any questions can be directed to the office of Harold MacQuinn, Inc. at 667-4653.

STATE OF MAINE PROBATE COURT 50 STATE STREET HANCOCK COUNTY ELLSWORTH, ME 04605
NOTICE TO CREDITORS 18-C MRSA 3-801

The following Personal Representatives have been appointed in the estates noted. The first publication date of this Notice is **April 29, 2021**. If you are a creditor of an estate listed below, you must present your claim within four months of the first publication date of this Notice to Creditors or be forever barred.

You may present your claim by filing a written statement of your claim on a proper form with the Register of Probate of this Court by delivering or mailing to the Personal Representative listed below at the address published by his name, a written statement of the claim indicating the basis therefore, the name and address of the claimant and the amount claimed, or in such other manner as the law may provide. See 18-C MRSA 3-804.

2021-152 ERIN J. LOOK, late of Bar Harbor, deceased. Alfred S. Wakeman 259 Mooseneck Rd Addison, ME 04606 appointed Personal Representative.

2021-153 MARGARET M. WHALEN, late of Blue Hill, deceased. Ellen S. Best PO Box 386 Blue Hill, ME 04614, appointed Personal Representative.

2021-156 CONSTANCE MARQUIS SAVAGE, late of Lamoine deceased. Darren Savage 377 Partridge Cove Road, Lamoine, ME 04605, appointed Personal Representative.

2021-157 HERMAN WELLESLEY SAVAGE, late of Lamoine, deceased. Darren Savage 377 Partridge Cove Road Lamoine, ME 04605, appointed Personal Representative.

2021-161 PAUL A. LIEBOW, late of Redondo Beach, CA, deceased. Sarah Matloff 1659 3rd St. Manhattan Beach, CA 90266, appointed Personal Representative.

2021-162 DON P. REIMAN, late of Deer Isle, deceased. Gwendolen C. Reiman 67 Davis Farm Dr Deer Isle, ME 04627, appointed Personal Representative.

2021-164 DUANE T. PERT, late of Sedgwick, deceased. Billy D. Pert 10 Rabbit Town Rd Franklin, ME 04634, appointed Personal Representative.

2021-165 RITA LUNDIN, late of Surry, deceased. Stephanie Lundin 291 Morgan Bay Rd Surry, ME 04684, appointed Personal Representative.

2021-169 LEROY E. COUSINS, late of Trenton, deceased. Diane M. Cousins 288 Knox Road Bar Harbor, ME 04609, appointed Personal Representative.

2021-170 VIRGINIA S. SIMMONS, late of Sedgwick, deceased. Julia A. Comeau 91 Pound Rd Addison, ME 04606, appointed Personal Representative.

2021-171 MARION E. RICH, late of Sullivan, deceased. Judyth Albee 49 Tucker Mtn Road Sullivan, ME 04664, appointed Personal Representative.

2021-173 ARTHUR E. BURNS, late of Lamoine, deceased. Cheryl A. Dean and Milton F. Dean 2470 San Pietro Cir Palm Beach Gardens, FL 33410, appointed Personal Representatives.

2021-174 MARJORIE DRAKE WARDWELL, late of Penobscot, deceased. David A. Wardwell 101 Bayview Road Penobscot, ME 04476, appointed Personal Representative.

Date: _____
Register of Probate

TOWN OF HANCOCK

Residents of Hancock

Town Meeting will be held on Tuesday, May 11, 2021 at 6:30 p.m. at the Hancock Grammar School. Seating will be limited and a "Zoom" log in will be available on the Town website to view the meeting Come to the Town Hall from 1-7 p.m. on Monday, May 10, 2021 to vote for the Elected Offices

AQUACULTURE LEASE APPLICATION COMMENT PERIOD

The Department of Marine Resources has received an experimental lease application for the following:

Applicant	Abigail Barrows	
Culture Type	☐ Bottom culture (No gear) ☒ Suspended culture (Bottom and/or surface gear)	
Species	☒ Shellfish ☐ Marine Algae ☐ Finfish ☐ Other	
Location, Waterbody, Town	Pickering Cove, Southeast Harbor, Deer Isle	
Lease Size and Term	4 acres	3 years
Comment Period Deadline and Submission	No later than 4:00 p.m. on May 29, 2021	DMR Attn: Aquaculture Division 21 State House Station Augusta, ME 04333-0021 DMRaquaculture@maine.gov

COMMENT PERIOD: DMR announces a **30-day public comment period** during which interested persons may submit written comments or request a public hearing on the application. A hearing is optional for experimental lease applications unless the Department receives five or more written requests from interested persons during the comment period. Please submit written comments by mail or e-mail to the address provided above by the deadline.

VIEW THE APPLICATION: To view a copy of the completed application, please visit: https://www.maine.gov/dmr/aquaculture/leases/pending/index.html

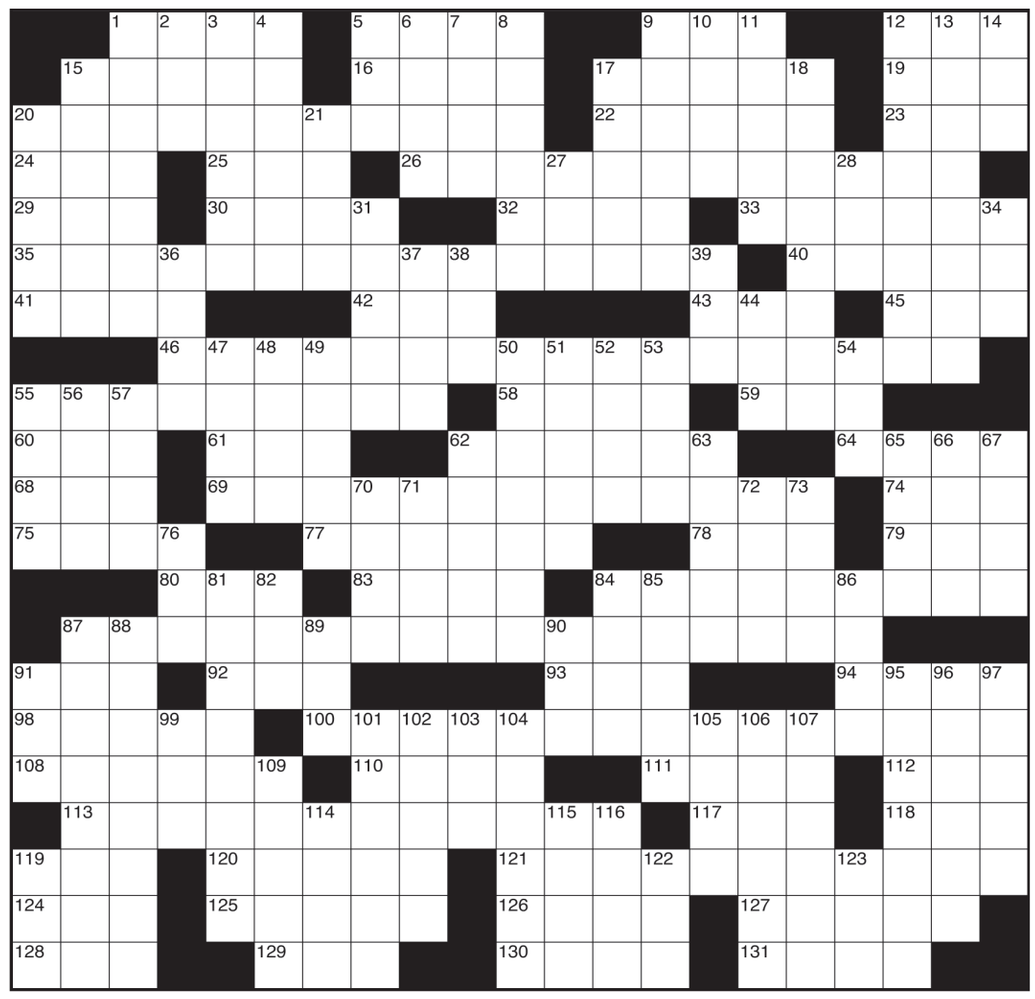
CONTACT THE APPLICANT: Please contact the applicant with any questions regarding their proposal. Contact information for the applicant can be found in their application.

DMR REVIEW: DMR staff will visit and assess the site in consideration of the legal requirements for aquaculture leases. Other state and federal agencies will also review the application. If you have additional questions or concerns, or to request a paper copy of the application, please contact: DMRaquaculture@maine.gov

Relevant Authority: The legal authority for this notice is 12 MRSA §6072-A (5) and DMR Rules Chapter 2.64

The American Crossword Puzzle

The Lesser-Known Beanie Babies By Merl Reagle



ACROSS

1 Goldfinger's Frobe
5 Famous Friend
9 Buddy
12 Visitor from Melmac
15 ___ for (exquisite)
16 "Sandwich" in the cookie aisle
17 Lutelike instrument
19 Roadblock
20 One of the less popular Beanie Babies?
22 Make ___ (emulate Loman)
23 Trait transmitter
24 Pluralized y
25 See 64 Across
26 One of the less popular Beanie Babies?
29 Bravo starter
30 Bear abodes
32 Dread
33 Used an old phone
35 One of the less popular Beanie Babies?
40 Lulu
41 Movie terrier
42 Santa ___
43 Buckeyes' sch.
45 Pub drink
46 One of the less popular Beanie Babies?
55 Some sweaters
58 It means 1/2
59 Flamenco shout
60 Abbr. on a lawyer's card
61 Till bill
62 Betsy's forte
64 Thieves' thwarter
68 Ring cop
69 One of the less popular Beanie Babies?
74 Actress Courteney
75 Destiny
77 Saw the sights
78 Golf prop
79 Diamond stat
80 Prelude to relief
83 Benny Goodman's instr.
84 Minx's quality
87 One of the less popular Beanie Babies?
91 Actor Herbert
92 Ltr. container
93 Summer mo.
94 Not new
98 "Hot diggity"
100 One of the less popular Beanie Babies?
108 Fantastic
110 Through
111 Field cover
112 Triangular sail
113 One of the less popular Beanie Babies?
117 "Emergency!"
118 Noted Burmese
119 Conservatory subj.
120 Sasha or Sacha Baron
121 One of the less popular Beanie Babies?
124 Shapiro of NPR
125 With Gay, a plane
126 Scratches (out)
127 Hammerin' Hank hit
128 Greek letter
129 Dine
130 Santa's checking it twice
131 Erwin et al.

DOWN

1 Leaves home
2 Gorey or Teller: abbr.
3 Saudi capital
4 Big name in tea
5 Ligeia author
6 Adds wrong, e.g.
7 Hud costar
8 Contact
9 Nightclub
10 D-Day beachhead
11 Bundled, as hay
12 King of Jordan, 1946-51
13 Actor Frank
14 Monk's title
15 Possessive pronoun
17 Doctor's order
18 Left-over
20 Around, date-wise
21 Suggestion
27 Ran into
28 Love Story composer Francis
31 Cool place, perhaps
34 Food coloring
36 Waist wear
37 Comes crashing down
38 Salary
39 "___ said!" (Mom's retort)
44 Sellout sign
47 Treatment regulators: abbr.
48 Lens-cleaner brand
49 Build
50 Caine film, Too Late ___
51 Hacked
52 Actor Jannings
53 Resinous tree
54 Wyo. neighbor
55 Random House founder
56 Confused
57 Area meas.
62 Purse feature
63 Rise
65 Plot of land
66 Fishing floats
67 The Y, for one
70 Ex-NYC mayor
71 Christmas
72 This, to André
73 Mel of football or Piet of math
76 Recede
81 Temporary suspension
82 What ht. is to alt.
84 Rabbit's tail
85 Zero
86 Algia opener
87 Alien costar
88 Food of the gods
89 RCA truckload
90 Actor Romano
91 Grumpy Grant
95 Name of many a Catholic church
96 Poet Wylie
97 Rid of listening devices
99 Above, to poets
101 "Oh, you're ___ at all!"
102 Oat genus
103 Cribbage marker
104 Launch
105 No problem
106 Wedding promises
107 Result
109 Critic Jeffrey
114 Holier-than-___
115 Golfer Isao
116 Low digits?
119 Wild West?
122 L.A. time zone
123 Down Under bird

Every puzzle has just one correct solution. See Section 3 Page 9

Subscribers to the digital edition can download a printable version of this puzzle.

JUMBLE THAT SCRAMBLED WORD GAME By David L. Hoyt and Jeff Knurek

Unscramble these Jumbles, one letter to each square, to form six ordinary words.

KAHESN
CAPECT
FRVEYI
SPIOEM
TGUINO
SYRAGS

Download the free JUST JUMBLE app • Follow us on Twitter @PlayJumble

Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

PRINT YOUR ANSWER IN THE CIRCLES BELOW

Every puzzle has just one correct solution. See Section 3, Page 9

Sudoku Puzzle 1

8		7	2			1	5	
9		1		6				
	3		4					
3	7	8			6			
			3			6	8	4
					4		6	
				9		2		8
	6	9			2	5		1

MEDIUM

Sudoku Puzzle 2

8		1				3		
6				7				
		4						5
1	9				6			
		8	3		7	2		
			8				9	3
2						9		
				5				1
		5				8		6

HARD

Every puzzle has just one correct solution. See Section 3 Page 9

Subscribers to the digital edition can download a printable version of this puzzle.

PUBLIC NOTICES

Like us on Facebook!

ELLSWORTH CITY COUNCIL

ELLSWORTH

FY 2022 BUDGET WORKSHOP SCHEDULE

In accordance with An Act To implement Provisions Necessary to the Health, Welfare and Safety of the Citizens of Maine in Response to the COVID-19 Public Health Emergency, as enacted to read: Sec G-1 1 MRSA §403-A Public proceedings through remote access during declaration of State of Emergency due to COVID-19, the meeting will be held live at 1 City Hall Plaza in the City Hall Council Chambers with only the City Council, City Manager, and/or Finance Director, and the Department Heads that are presenting as the allowable number of occupancy permits. Citizens may email questions and public comments to Chair Dale Hamilton at dhamilton@ellsworthmaine.gov prior to and throughout the duration of the meeting. The meeting will be broadcast live on the City of Ellsworth, Maine Facebook page and YouTube Page; as well as recorded and made available live on Spectrum Channel 1303.

Monday, April 12 6 PM	School Department Budget. Discussion about the latest information regarding federal relief funds (restrictions, appropriate use, public planning as to how the funding should be used).
Monday, April 26 6 PM	Introduction, Review of Revenues, Administrative DepartmentBudgets,MaintenanceBudget,General Assistance Budget, and Social Services Agencies.
Monday, May 3 6 PM	Public Safety Budgets.
Monday, May 10 6 PM	Library, Recreation, Public Works, Wastewater, Water Department, and Capital Budgets. Council Review and Discussion.

Town of Trenton

Abutter's Notice
LIQUOR LICENSE

The Trenton Board of Selectmen will hear an application from GH & PH Incorporated (Lunt's Gateway Lobster Pound) 1133 Bar Harbor Road, for a Liquor License. The hearing will take place at the regular Select Meeting on May 4th at 7:00 p.m. at the Trenton Town Office. Interested parties are encouraged to attend.

PUBLIC HEARING
TOWN OF GOULDSBORO

Notice is hereby given that a public hearing will be held Thursday, May 13, 2021 at 6:00 pm at the Gouldsboro Town Office to consider renewal Innkeeper licenses for:

Acadia's Oceanside Meadows Inn
(Sundaram, Inc./ Ben Walter & Sonja Sundaram
Black Duck Inn – Corea Harbor
(William & Rachel Mathewsen)
Elsa's Inn on the Harbor – Prospect Harbor
(Scott Markwood)

Public comment will be heard at that time. Prior to the hearing date, written comment may be sent to the Gouldsboro Town Office, PO Box 68, Prospect Harbor, ME 04669

www.ellsworthamerican.com

NOTICE OF RESCHEDULED PUBLIC INFORMATIONAL MEETING MAY 6, 2021

Please take note that, pursuant to 38 MRSA, Sections 413 and 414-A, American Aquafarms, of 68 Commercial Street, Portland, ME 04101, intends to file a wastewater discharge permit application with the Department of Environmental Protection (DEP). The application is for the discharge of 90 m3 per sec of circulated bay water through a closed pen aquaculture facility located northwest of Porcupine Island, taken from and returned back into Frenchman Bay in Gouldsboro, Maine.

The applicant will hold a public informational meeting to inform the public about the project and its anticipated environmental impacts and to educate the public about the opportunities for public comment on the project. Due to the COVID-19 pandemic and restrictions on in-person gatherings, **the public meeting will be held via Zoom Webinar and by telephone on Thursday, May 6, 2021, starting at 6:00 p.m.** Questions from the public will be taken both online and by phone. Please direct any questions or comments to Tom Brennan at thomas.j.brennan@americanaquafarms.com or (207)405-7451.

Please click the link below to join the webinar:

https://bernsteinshur.zoom.us/j/96511217550?pwd=ZWVDN2FQZ2x-5QU8zSWVGTzFWdFMxdz09

Webinar ID: 965 1121 7550

Passcode: 671035

Or Telephone (for higher quality, dial a number based on your current location):

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TOWN OF SORRENTO

PUBLIC HEARING

The Town of Sorrento will hold a public hearing to review a renewal application by Guyette's, Inc., 19 Walters Drive, Sorrento, ME for a Junkyard Permit. The hearing will be held on May 5, 2021 at 7:00 p.m., via ZOOM meeting, ID 865 3562 3920, password 307652. Any member of the public may address the hearing regarding the permit application.

American Aquafarms Public Informational Meeting
5/6/2021

List of Panelists

User Name	Email
Mary Costigan	[redacted]
Elizabeth M. Ransom	
Erling Kristiansen	
Fredrik Friis	
Mikael Rønes	
Thomas J. Brennan	
Nathan Dill	
Eirik Jørs	

List of Attendees

User Name	Email
mary lou barker	[redacted]
Jim Mahaffie	
Holly Faubel	
mike	
Thomas Mckeag	
cgbrackett	
Jeff Romano	
David Seaton	
USACE	
Sarah Steinhardt	
sheiladenny-brown	
jaye orgera	
Jim Cathcart	
DanaRYounger	
Sarah Redmond	
Jane Shipman	
J S A	
Ted O'Meara	
Trina Wellman	
Deirdre McArdle	
John Kelly# Acadia National Park	
linda barron	
Jim Coffman	
Michele Marks	
Austen Sharpe	
carol Woodcock	
Portia Osborne	
Larry Billett	
alan	
blair	
Jim O'Connell	

Jack Candy	[redacted]
AJ Longmaid	
longmaid	
Kavya	
Susan Bruce	
savtabirdie	
jay horschak	
Ken	
James Paterson	
Jerry Kron	
Chris Rector (US Sen. King)	
barb	
William ceckler	
Eric Friedman	
Garrett Read	
Cathy Johnson	
Eleanor	
Nancy	
Charlie	
Gillian Newstead	
Lincoln Millstein	
Andrea Angera	
Claudine Lurvey	
vrea	
Henry Sharpe	
Jerry	
Shelley Barron	
Nicole Kirchhoff	
Douglas Sharpe	
David Johnson	
Rebecca Cole-Will	
Carol Chappell	
Jackie Weaver# Friends of Schoodic Peninsula	
Holly Andrew	
Donna Scarboro	
Mike Summerer	
Claire Von Karls	
Michael J Good	
juliesharpe	
Joanna Fogg	
Heidi	
brad	
phadlock	
Dick Fisher	
Fiona de Koning	
FBC Staff	
ARTHUR MANNING	

SC	[redacted]
Rhonda Snowaert	
Gregg.Wood	
Jane Woodruff	
Kim Holden# Doula x Design	
Mark Whiting	
peter	
Ann Hoffner	
Roger Dean	
Bob Evelyn	
Chandler Williams	
Colleen	
andrelively	
Joyce Ann	
Kent Syler	
Josh Cutler	
maureen and rick andrew	
BJEaton	
James Kearns	
Steve Stone	
Paul Parshley	
Kathleen Friend of Frenchman Bay	
Darron Collins	
Letitia Baldwin	
Amy Richards	
Donna Merkel	
MarkSmith	
Charlotte and Robin Sweeney	
Kirk Emerson	
Jolene Weiskittel	
Chris Petersen	
Erika Lederman	
brett ciccotelli	
magical mystery girl	
Colleen	
Robert Waldner	
Robert Schmidt	
Robert Nichols	
sarah	
hthoward	
Pamela	
Laura Milkert	
Deiran Manning	
Rick Woodruff	
Bob DeForrest	
roger	
Ellie Sharpe	

David Smith	[redacted]
Stacey Caulk	
Beth Jones-Fox ABC Bangor	
Robert Bushwaller	
Natalie Springuel# Maine Sea Grant	
Craig Weaver	
Lauren# NPCA	
Moore	
F.M. Weld	
Susan Weiss	
Ann Hirschhorn	
Brian Henkel	
Stephanie Clement	
Roy Gruver	
Crystal Canney	
Joann Williams	
Shemaya Laurel	
David Farmer	
Sandra Claire	
John Heist	
elisabeth	
Tom	
Ben	
Jeremy Mark	
Lauren	
Ceckler	
Timothy Leonard (he#him)	
Wyatt Sharpe	
Abe Miller-Rushing	
Jeri Bowers	
EmmaAlbee	
Kathleen Nauss	
Tiffany Linscott	
Holly	
wendygamble	
Bill Horner	
Jane Bushwaller	
Susan Bernat	
Cheryl Claiborne	
Ant Blasi	
Lee H	
pamela	
Michael Fisher	

Other Attended (via phone)

User Name	Phone Number
Unknown	[redacted]

Summary of Questions and Responses from the May 6, 2021 Public Information Meeting

1. Why is American Aquafarms using the term "closed pen technology" when there will be water pumped into and out of the pens from Frenchman Bay? It was suggested that the term "semi-closed system" is the industry standard and should be used.

   American Aquafarms uses the term "closed pens" but agrees that this technology could also be described as a semi-closed containment system. The proposed production method provides a higher containment security (double barrier) than open pens, has been shown to reduce the risk of pathogen infections, and provides a more suitable rearing environment for the fish. Because the pens are closed off from the surrounding environment, the environment inside the pens is more controlled and protected, and impacts to the surroundings are limited to the water being discharged.

2. It was noted that the salmon farming industry has had a lot of problems with open pen systems. From American Aquafarms' perspective, what could possibly go wrong with the proposed closed pen operation?

   American Aquafarms is committed to going to extra mile in constructing and operating the proposed facility so that it causes no harm. As farmers, we want to be responsible not only to the operation itself, but also to the environment and to the communities where we are operating. While the proposed technology is not new, it is not as commonly used as open pens because there is a higher initial investment. However, this higher level of investment means that the closed pen systems have reduced risks (such as risk of fish escapes or pathogen infection). In addition, American Aquafarms is drawing on the innovation, regulations, and knowledge that have come from the past 50 years of the salmon farming industry in Norway. Throughout the development process, American Aquafarms has added in contingency plans and extra layers of security to safeguard against incidents.

3. How will the site be monitored? Who will be responsible for monitoring, and how often will monitoring occur? What is the penalty for not meeting standards?

   American Aquafarms will follow the discharge license to be issued by the Maine Department of Environmental Protection (MEDEP). It is anticipated that some metrics (such as flow volume) will be monitored continuously. Other parameters may be monitored daily, weekly, or monthly. Some monitoring can easily be accomplished in an automatic fashion. American Aquafarms will employ a wastewater treatment plant (WWTP) operator licensed in the State of Maine with knowledge of this type of monitoring. The MEDEP will be able to audit the facility at any time to ensure compliance and address concerns. Additional monitoring is expected to be required at the discharge locations and in the larger bay. If the facility is not complying with the MEDEP discharge license, the facility could be shut down, fined, or required to identify and implement measures to

correct the operation and regain compliance. The facility will also need to demonstrate compliance when applying for permit renewals.

4. If the water that will be discharged from the pens is so highly treated, why can't American Aquafarms recirculate, cool, and re-use the water in the pens?

   The fish produce carbon dioxide and ammonia, which are present in the discharge water. Although these compounds are present in relatively low concentrations, were the water from the pens to be continuously re-circulated, they would accumulate and become unfavorable for the fish living in the pens. A similar situation would occur for a human sitting in a closed room without any ventilation; one can imagine that carbon dioxide would build up in the room over time and lead to unfavorable conditions if there is no air flow into or out of the room.

5. If recirculating water would be harmful to fish in the pens, would it harm wild fish in the bay?

   No, the amount of water in the pens is very small compared to the amount in the bay. While carbon dioxide or ammonia could build up in the amount of water in a single pen, this accumulation would not occur within the entire bay.

6. How do neighboring pens affect each other? Is discharged water from one pen taken into an adjacent pen?

   American Aquafarms and the pen designers have conducted modeling to confirm that impacts from one pen on another would be negligible. The volume of water being discharged, compared to the overall volume of water being carried past the pens by tidal currents, is small. It is important to American Aquafarms to protect fish health and ensure that the water drawn into the pens is clean.

7. "No degradation" implies no harmful nutrients or contaminants are being added to the water. Are no incremental amounts being added to the bay?

   The project will meet 40 CFR § 131.12, the anti-degradation policy under the Clean Water Act. MEDEP will confirm that the project will use no more than 20% of the remaining assimilative capacity of the receiving waters. The proposed project will have discharge of nitrogen, phosphorus, suspended solids, and other constituents as a result of the operation, but those amounts will meet the standards that have been designed to protect the bay.

8. Could you explain the role of tides and currents? Are they beneficial or dangerous to the project?

Tides and currents play a role in the mixing and dilution of discharge waters, and are a practical concern in designing the pens and mooring system. The pen site has been chosen to have a balance; the currents at the proposed sites are not as strong as the open ocean but allow for sufficient mixing to occur.

9. Were data from working aquaculture sites with measured discharged concentrations used in the modeling and permit application?

   American Aquafarms has used a scientific basis to approach the proposed project. Modeling data were based on a number of data sources, including operational data from existing and compliant aquaculture projects in Norway. In addition, there are studies looking at the allocation of nutrients in fish (growth, excretion, etc.) that have led to standards in modeling fish farms and associated discharges. There is a standard conversion ratio for feed that can be used to estimate waste and expected discharge concentrations based on the number of fish, fish size, and fish feed contents.

10. How will the models be validated? Shouldn't the models be validated before constructing the project?

    It is possible that the permit will require continued collection of acoustic doppler current profiler (ADCP) data at stations in the bay over time in addition to water quality data. This data would allow for evaluation of the model and assessment of changes in the bay.

    Regarding model validation prior to construction, based on the current modeling data, the proposed discharge is much smaller than the regulatory thresholds (less than 20% of remaining assimilative capacity of the receiving waters). The dilution of nutrients in the bay will be such that the likelihood of harm is very low.

11. Why not use a more comprehensive model?

    The CORMIX model is a standard model for wastewater discharge permitting and mixing, is supported by the EPA, and specifically referenced in the Maine DEP regulations. More complex models typically require more inputs and need more data to compare outputs and validate the model. The determination of what model to use was based on regulations, practical concerns (time, costs, data input needs), and a review of what model can produce the desired data outputs.

12. How will the discharge impact nutrient webs in the bay?

    The discharge is not anticipated to have a negative impact on nutrient webs in the bay. Based on our model, it is anticipated that the currents and tides will allow for dilution of nutrients in the discharge water. The model was intentionally conservative in examining a smaller volume of water

than the entire bay for the far-field dilution model, which means that the discharge will be mixed with even more water than used in this model.

13. Has modeling been done to show the amount of heat transfer to the deeper water of the bay when pumping water into the pens? What biological changes would occur due to increased temperature in the bay?

    The water intake and discharge locations will be at similar depths; therefore, minimal temperature transfer to depth will occur. While some heat transfer from fish will occur, no other project components are expected to raise the temperature of the discharge water. It is anticipated that the MEDEP permit will regulate temperature and will require that discharge water not exceed certain temperature limits.

14. Will the effluent plume make water in Frenchman Bay anoxic and cause eutrophication? It was noted that Frenchman Bay is deep and therefore the water has a long residence time. With stratification, is it possible that contaminants could become trapped in the Bay and accumulate to high concentrations?

    The modeled effluent plumes include simulations of many different scenarios that may occur with changing stratification, tidal current speed, and current direction; the full modeling report will be available in the MEDEP application package. The CORMIX model was not used to address nutrient concentrations and does not look at algae blooms or eutrophication, but the far-field model would be the appropriate model to consider such impacts. The processes that that lead to algal blooms and eutrophication are highly complex and would be difficult to model with any degree of confidence. Therefore, we follow the State's antidegradation policy, which provides a simpler approach based on empirical data and assimilative capacity to ensure discharges do not degrade dissolved oxygen in the waterbody.

15. It was noted that the baseline water quality data, including nitrogen concentrations, was conducted in the summer and fall. As the facility would be operating year-round, should baseline data be collected in the winter?

    The most typical time of year to observe algal blooms is in the late summer and early fall, due to the increase in stratification and decline in dissolved oxygen that may be present as the surface temperatures in the bay rise. For this reason, MEDEP typically requires that facilities monitor during May through October, capturing potential "worst case" conditions. Should MEDEP require additional monitoring, American Aquafarms will comply with this requirement.

16. Does the dilution model account for the entire water column in three dimensions?

The CORMIX model is a standard model to analyze near-field dilution and provides a three-dimensional output. This model is a steady-state model, which means it does not account for changes in the current direction or current speed over time. That means that in tidal environments the results are only valid if you consider them as a brief snapshot of the mixing, generally less than 15 minutes. The model includes multiple simulations with different current speeds and different current directions because one particular solution will not be applicable to the full tidal cycle or over entire seasons. Using the model's output, the time of lowest dilution can be identified as the point when the highest concentrations are expected.

17. What is the depth of the effluent pipe? Will the liquid effluent be treated for nitrogen in the water (i.e., ammonia)?

    The effluent discharge would be at a depth of approximately 98 feet for the discharge from the pens, and between 10 and 30 feet for discharge from the waste barge. While nitrogen would be present in liquid form in the effluent, the concentration of ammonia in the diluted effluent will be quite low. The discharge water will be required to meet state anti-degradation standards.

18. Would oxygen be pumped into the water used in pens?

    Yes, American Aquafarms will inject oxygen into the water going into pens to meet the metabolic needs of the fish.

19. What can cause fish in the pens to exceed the target density, and what would happen when that occurs?

    Fish will grow in the pens until they reach the target rearing density or biomass density of up to 35 kg/m^3 (note that the maximum density would be 40 kg/m^3). As fish grow and stocking densities reach upper limits, the fish batch will be split into new pens. When larger individuals reach the target density, the fish will be harvested.

20. How will American Aquafarms ensure that no fish escape? It was noted that escapes could occur when transferring fish from boats to the net pens.

    American Aquafarms will have a robust biological security plan in place, including multiple containment systems to prevent fish escapes. Trained operators will also be present during fish transfers to stop transfers and prevent escapes if needed.

21. What medicines or chemicals will be used to treat the fish? What is the list of potential treatments?

The pens will be stocked with water from Frenchman Bay, oxygen, fish, and fish feed; no medicines or chemicals would be added to the pens or the feed. Vaccination procedures will be in place during the freshwater phase to inoculate the fish against viral and bacterial infections. Ova will be selected from an egg supplier that is resistant to IPM. As part of the discharge application to MEDEP, a chemical list will be provided. However, several of the chemicals included on the list will be listed with an expected annual use of 0 pounds or 0 gallons. In the rare event that one of these compounds needs to be used, American Aquafarms will seek approval from MEDEP prior to administering the compound.

22. How will American Aquafarms prevent a sea lice problem from occurring in Frenchman Bay as a result of the project?

One of the biggest advantages of closed pen systems is that they collect water from a depth where sea lice that are harmful to salmon do not exist. This has been well documented in a number of studies. As sea lice are already found in some open pen systems in Maine, American Aquafarms sees the proposed closed pen systems as a solution to the sea lice problem.

23. What happens to fish during normal and extraordinary weather events?

The pens will be kept in a state of overpressure by pumping the water column inside the pen to a height between 4 and 15 cm above the surrounding sea level. This ensures a stable and rigid placement of the polymer sack in the water column, which makes it able to withstand external pressures from currents and weather, including storm events. This type of pen was designed for use in Norway, where stormy waters and heavy waves occur year-round and especially during the winter, and the design is expected to work similarly in Maine. In addition, the proposed sites were chosen because they are more sheltered and not subject to the strong weather and waves that would occur in open ocean water.

In terms of discharge, more variation in tide or storm surge will result in more turbulence and, therefore, more mixing in the water. This would increase dilution of the discharge water.

24. What plans are in place to address possible adverse events, including ones that could potentially affect water quality of Frenchman Bay? Potential adverse events include diesel fuel spillage, electrical fires, and algal blooms. What is the possible adverse impact that a red tide event could have on the operation? Could the project either stimulate or accelerate marine algal blooms?

Risks of accidents will be discussed during the Maine Department of Marine Resources (DMR) scoping session. American Aquafarms has prepared a spill prevention, control, and countermeasure plan, which includes multiple layers of protection, spill prevention kits, the use of safety routines, locks on refueling houses, and other risk mitigation measures.

25. What if the power goes out? Would the pens be less protected during a storm?

    Pumps at each pen can provide more power than is needed. In addition, back-up generators would be available at each pen. Finally, if pumps at one pen were not working, the system at a neighboring pen could be used.

26. What about sustainability of the supply chain?

    Sustainability is very important to American Aquafarms and is being considered throughout project development. For example, suppliers will be required to source their feed ingredients and are members of sustainable sourcing projects such as the Roundtable on Responsible Soy (RTRS) and the IFFO-RS MarinTrust Standard.

27. Will American Aquafarms meet the same environmental standards as land-based operations?

    The project will comply with State and Federal regulations, including the same applicable permitting requirements and environmental standards that have been required of land-based operations.

28. As this is a new technology, should the State require a full Environmental Impact Statement (EIS) before considering these permit applications?

    The closed pen systems are not a new technology, and have been in use since the 1980s. These systems have been recognized to be an enhanced version of open pens that provides a more stable environment for the fish and reduce environmental impacts due to the ability to treat water and remove waste before discharge. The Blue Ocean Technology that would be used for this project applies this established technology specifically to treating fish waste. In Norway, this technology has been used to raise fish for the full growth cycle, which is what is proposed for the Frenchman Bay sites as well.

    An EIS is a specific type of study under Federal law. The U.S. Army Corps of Engineers (USACE) is the Federal agency with a regulatory role over the proposed project; if the USACE determines that an EIS is needed, then that type of study would be prepared. The MEDEP discharge permit review process includes environmental components. If the MEDEP finds that the proposed discharge would cause harm and would not meet their standards, they will not issue the discharge license. It is expected that the discharge license will include monitoring requirements and other environmental safeguards. In addition, the DMR will conduct an extensive environmental review during their review of the lease applications, which will be addressed in a separate scoping session.

American Aquafarms has confidence in the regulatory system and will do what is required by the regulatory agencies. We feel confident that the extensive reviews that will be conducted by MEDEP, DMR, and USACE will thoroughly consider the potential impacts of the project. If the USACE requires an EIS, American Aquafarms will work with USACE to complete that level of analysis.

29. Are there any comparable installations in North America?

While the proposed project may not be the first closed pen aquaculture project in North America, it might be the first of this scale.

30. Has a project of this scale been built and operated previously?

There are many closed pen operations in Norway that are currently operating. It is hard to compare the scale as each pen in the proposed facility would function as a single system. This is not the largest closed pen aquaculture facility in terms of acreage or in terms of potential environmental impacts.

31. How long is the permit or lease period?

The standard DMR lease period is 20 years; the standard DEP discharge license must be renewed every 5 years.

32. Do MEDEP regulations allow for an experimental permit since this is the first application of this technology in Maine?

An experimental lease is an option through the DMR lease process. However, as experimental leases are limited in area to be leased and length of the lease, they are not suited for an investment of this scale.

33. It was observed that other aquaculture projects in Maine have added pens to existing leases. Is that what American Aquafarms plans to do?

No, American Aquafarms has no plans to add more pens than currently proposed. The number of pens would match the planned capacity of the processing facility, support year-round jobs, and allow for selling fresh fish throughout the year. A ramp-up plan would be followed for a gradual start-up of operations at the sites. The proposed lease sites are larger than the footprint of the pens due to the mooring system (and not due to plans for future expansion).